

State Officials's

healthy states initiative



GUIDE *to Wellness*

A publication of
The Council of State Governments



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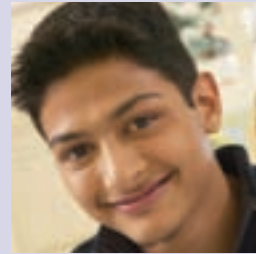
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The Council of State Governments

The Council of State Governments is the premier multibranch organization forecasting policy trends for the community of states, commonwealths and territories on a national and regional basis. CSG alerts state elected and appointed officials to emerging social, economic and political trends; offers innovative state policy responses to rapidly changing conditions; and advocates multistate problem-solving to maximize resources and competitiveness. CSG promotes excellence in decision-making and leadership skills and champions state sovereignty.

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The Healthy States Initiative

A partnership to promote public health

The Healthy States Initiative helps state leaders access the information they need to make informed decisions on public health issues. The initiative brings together state legislators, Centers for Disease Control and Prevention (CDC) officials, state health department officials and public health experts to share information and to identify innovative solutions.

The Council of State Government's partners in the initiative are the National Black Caucus of State Legislators (NBCSL) and the National Hispanic Caucus of State Legislators (NHCSL). These organizations enhance information sharing with state legislators and policymakers on critical public health issues.

Why public health?

State legislators play a vital role in determining the structure and resources available to state and local agencies dedicated to protecting the public's health. Public health agencies educate the public and offer interventions across a wide spectrum of public health issues including:

- Ensuring that children and at-risk adults are immunized against deadly diseases
- Assisting victims of chronic conditions such as cancer, heart disease and asthma
- Preventing disease and disability resulting from interactions between people and the environment
- Researching how HIV/AIDS infections and other sexually transmitted diseases can be prevented
- Promoting the health and well-being of people with disabilities
- Working with schools to prevent risky behavior among children, adolescents and young adults

Information resources for state policymakers

New information resources produced under this initiative include:

- *Healthy States Web site.* This unique Web site offers information and resources on many public health issues. Visit www.healthystates.csg.org to get information, sign up for publications and view the calendar and other information on the initiative.
- *Healthy States e-weekly.* Each week, this free weekly electronic newsletter brings the latest public health news, resources, reports and upcoming events straight to your inbox.
- *Healthy States Quarterly.* CSG publishes a free quarterly newsletter covering public health legislative and policy trends, innovative best practices from the executive and legislative branches, current research and information on Healthy States activities.
- *Forums and Web Conferences.* Web conferences are offered to allow public health experts, legislators and legislative staff to interact on priority public health issues. Forums include educational sessions on public health issues, new legislator training and roundtable discussions with peers and public health experts.
- *Healthy States Publications.* New resources will assist state legislators interested in public health topics, including cancer and chronic disease prevention, HIV/AIDS and sexually transmitted disease prevention, vaccines, health disparities and school health.

For More Information

If you are interested in the learning opportunities available through the Healthy States Initiative, visit www.healthystates.csg.org to sign up for newsletters, register for upcoming events and learn more about important public health issues.



State Official’s Guide to Wellness

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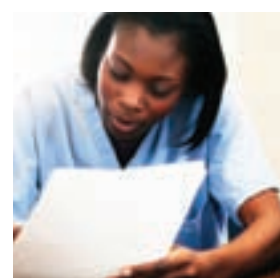
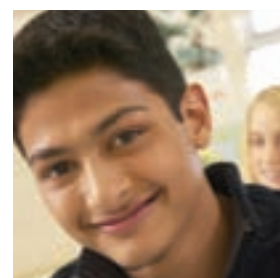
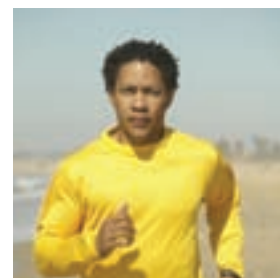
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Foreword

Want to know how to stay well? Stop smoking. Be active. Eat healthy foods. Keep your blood pressure and cholesterol under control. See your doctor for recommended health screenings.

The evidence shows if you follow this simple advice, you'll greatly improve your chances for becoming and staying well. The trouble is that while this advice is simple to give, it can be challenging to heed in daily life. This State Official's Guide to Wellness is designed for state policymakers who want to help make it easier for all of us to make smart choices that will keep us well.

Promoting wellness will help your state's residents live longer, more productive and healthier lives as well as help your state's fiscal health. Today, almost half of Americans suffer from chronic conditions. The costs to treat those conditions exceed \$1 trillion, which impacts state Medicaid budgets, as well as state employee health benefits and other health and welfare costs. But don't let the cost distract you. The truly striking fact is that a vast majority of all chronic diseases can either be prevented, or their onsets significantly delayed, to allow most of us to live much healthier lives. What's more, states have already discovered promising ways to promote wellness.

In this guide, state policymakers will see a snapshot of the current state of health in America, find out what the chronic disease trend-lines portend, and be given a framework for understanding the major policy issues surrounding wellness. Most usefully, they will learn how states have begun to use wellness initiatives to promote healthy behaviors.

This guide was produced by the Healthy States Initiative, a partnership among the Centers for Disease Control and Prevention, The Council of State Governments, the National Black Caucus of State Legislators and the National Hispanic Caucus of State Legislators. The Healthy States Initiative is designed to help provide state leaders with the information they need to make sound decisions about important public health issues.

If you are a state policymaker, we invite you to use this guide on wellness policy to help your state curb health costs and boost the quality of life for your citizens.



Governor Ruth Ann Minner
Delaware
*The Council of State Governments,
Immediate Past President*



Daniel M. Sprague
*Executive Director
The Council of State Governments*

Executive Summary

State policymakers are increasingly faced with decisions on funding various state government expenses—such as education, health care, transportation and social services—while also supporting efficient government, promoting economic and workforce development and keeping taxes and fees reasonable. There is no magic potion for balancing all these burdens: all these competing interests are essential components of a vibrant society and economy. Health care is one area of growing concern among economists and policy experts. Health care expenses are consuming progressively larger portions of state budgets and the national gross domestic product, and economists and experts predict that expenses will grow more quickly. This simple fact sets health and health care apart from other issues affecting states, such as education and transportation.

Health care expenses in the United States are growing at just over twice the pace of national gross domestic product. This means that every year, health care costs will consume more and more of the nation’s wealth, leaving less funding for other needed programs, such as highways. This also means that policymakers at the federal, state and local levels will experience more pressure to invest limited resources in many important competing interests, such as funding critical highways and transit projects, education and health care services.

In addition to balancing the public’s checkbook, policymakers are also charged with protecting the public’s health. There is a long history of public health policy solutions for controlling infectious diseases such as tuberculosis, immunizations to protect children from vaccine-preventable diseases and seat belt policies to protect drivers from injury.

Preventing Chronic Diseases

Protecting the public from deadly and disabling chronic diseases is no different. Currently, only approximately 5 cents of every health care dollar spent in the United States is dedicated to prevention. However, wellness initiatives have proved to be cost-effective and shown to be

good investments for businesses (discussed in Chapter 1). Accordingly, policymakers are beginning to embrace the key elements of wellness and disease prevention to make the best use of public monies.

In comparison, over the past decade, policy solutions to health care costs have emphasized cost containment for health services. Although many strategies have been tried, costs continue to increase. One of the most effective ways to reduce costs is to combat their largest underlying causes—chronic diseases.

State legislators, governors, Congress and the federal government are turning to wellness and chronic disease prevention initiatives, to promote prevention of disease and encourage Americans to live healthier lives. Wellness is “the condition of good physical and mental health, especially when maintained by proper diet, exercise and habits.”¹ Some policymakers have begun wellness initiatives to promote healthy behaviors such as avoiding tobacco use, being physically active, eating healthy foods, controlling blood pressure and cholesterol, getting appropriate health screenings (for adults as well as children and adolescents), and avoiding risky behaviors. Wellness initiatives have been shown to keep people healthy, reduce complications in those who already have chronic diseases and reduce costs for health care and associated lost productivity.

The *State Official’s Guide to Wellness* highlights efforts to promote wellness and prevent chronic diseases by focusing on promoting healthy individual behaviors and improving the living and working environments in which individuals make choices. Recommended actions for wellness include:

- Avoiding tobacco use and secondhand smoke
- Eating healthy foods
- Staying physically active
- Controlling blood pressure and cholesterol
- Getting appropriate health screenings
- Avoiding risky behaviors in children and adolescents

What Policymakers Can Do

To support wellness, state policymakers can:

- Consider legislation to foster participation by businesses, state and local agencies, and communities to promote wellness and its key components;
- Engage allies and opponents in policy discussions to arrive at sensible and practical solutions to unique state economic, political, cultural and demographic conditions;
- Become champions for wellness in states and statehouses by pushing for adoption of proven health promotion and disease prevention programs and policies;

- Take lessons learned in the private sector on the economic benefits of wellness and implement wellness statewide and for state employees;
- Provide incentives for businesses to continue to provide and expand worksite and employee wellness initiatives; and
- Work with colleagues from other states to share ideas on successes, challenges and lessons learned.

This guide presents essential information on wellness and its key components, health status and economic data, and state wellness legislation and initiatives. Furthermore, the guide discusses issues that influence success in supporting wellness programs. Finally, a list of resources is included for additional information on wellness.

Acknowledgements

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Chapter One
**What do state officials need to know
about wellness and chronic diseases?**

Chapter One

What do state officials need to know about wellness and chronic diseases?

A chronic disease is one that lasts a year or longer, limits an individual's activities and may require ongoing care.² Examples are diabetes, cancer, arthritis and heart disease. Today, more than 133 million Americans have at least one chronic condition. In 2001, the year reflecting the most recent data, 24 percent of Americans had two or more chronic conditions.³

Trends in Health and Chronic Disease

Experts predict the problem of chronic diseases will worsen over the next few decades. By 2030, the number of Americans suffering from a chronic disease will reach 171 million. Between 2000 and 2030, the number of Americans with chronic conditions will increase by 37 percent.⁴ Several factors contribute to this predicament:

- **Ageing Population.** Approximately 20 percent of the U.S. population will be over 65 by 2030, a significant jump from the current 13 percent.⁵ The baby boom generation is reaching retirement age, and as its members get older, they are developing chronic diseases.
- **Medical and Technological Advances.** The dramatic increase in life expectancy over the past 50 years is in part due to the medical advances that have enabled people to manage diseases that once led quickly to death. Advanced medical care is able to treat acute illness better, which results in more people surviving, but also living with chronic illness.
- **Health Care System.** The U.S. health care system has not adapted to evolving health needs—from a population needing treatment of infectious and acute illness in the 1900s to a population requiring prevention and treatment of chronic diseases in the 21st century.
- **Chronic Disease Risk Among Youth and Young Adults.** Experts see a growing number of chronic diseases and risk factors among younger adults and children. For example, while it is still relatively rare, health care providers are finding type 2 diabetes (adult onset) among children and are diagnosing type 2 diabetes more frequently in American Indians, African-Americans and Hispanic-Americans. Obesity and lack of physical activity among young people, as well as exposure to a mother's diabetes while in the womb, may contribute to the increase in this type of diabetes in children and adolescents.⁶

By 2030, the number of Americans suffering from a chronic disease will reach 171 million. Between 2000 and 2030, the number of Americans with chronic conditions will increase by 37 percent.⁴



Certain populations, such as low-income persons, persons of color and those with lower socio-economic status, are affected more adversely by chronic diseases.



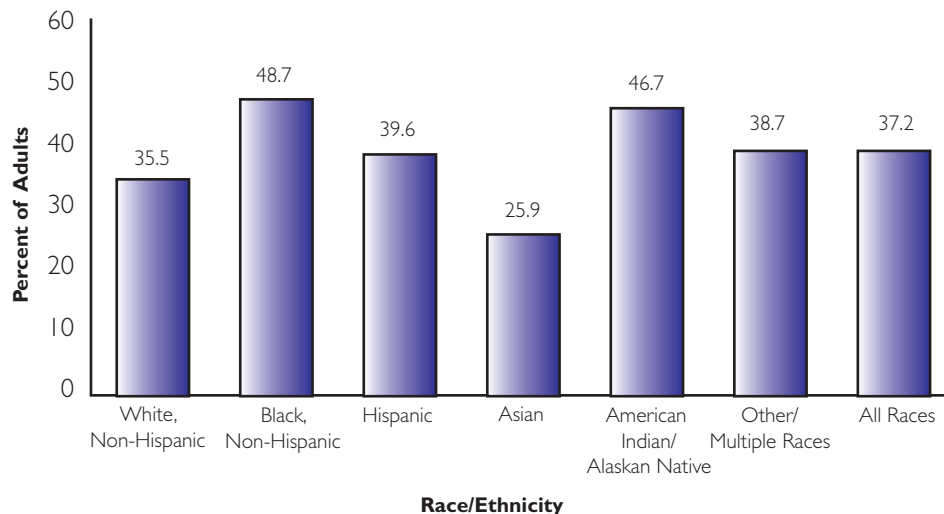
Disparities of Chronic Diseases

Certain populations, such as low-income persons, persons of color and those with lower socio-economic status, are affected more adversely by chronic diseases. Without addressing specific disparities among various populations, wellness for the entire population cannot be achieved. Policies and programs may have the greatest impact among disadvantaged populations where the social and economic burden is the highest. Nearly every chronic disease affects these population groups in a disproportionate way. Some examples include:

Diabetes

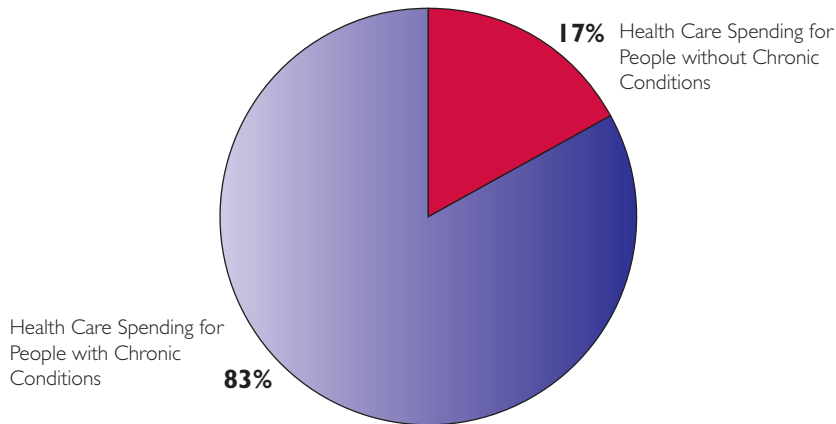
Diabetes has its greatest effects on older adults, women and certain racial and ethnic groups. One in five adults over 65 has diabetes. African-American, Hispanic, American Indian and Alaska Native adults are more likely to have diabetes than white adults.⁷ Blacks, Hispanics and American Indians/Alaska Natives are more likely than whites to die from diabetes.⁸

Figure I. Multiple Heart Disease and Stroke Risk Factors Among U.S. Adults Ages 18 Years and Older, 2003



Source: Centers for Disease Control and Prevention, *Racial/Ethnic and Socioeconomic Disparities in Multiple Risk Factors for Heart Disease and Stroke—United States, 2003*, MMWR Weekly, February 11, 2005. Available at <http://www.cdc.gov/mmwr>

Figure 2. Health Care Spending for People with Chronic Conditions vs. People Without Chronic Conditions, 2001



Source: Partnership for Solutions, *Making the Case for Ongoing Care*, 2004. Medical Expenditure Panel Survey, 2001.

Cancer

African-Americans are more likely to die of cancer than people of any other racial or ethnic group.⁹ African-American women are more likely to die of breast cancer than are women of any other racial or ethnic group. The incidence of cervical cancer—a 100 percent preventable cancer—is more than five times greater among Vietnamese women in the United States than among white women.¹⁰

Cardiovascular Disease

Coronary heart disease prevalence and heart disease death rates are higher among men than women and higher among African-Americans than among whites. A variety of researchers have found racial, ethnic and socioeconomic differences in cardiac care, especially invasive cardiovascular procedures.^{12, 13, 14, 15, 16} Figure 1 shows the disproportionately high rate of cardiovascular risk factors in minorities over age 18. While Asians had the lowest rate, all other racial and ethnic groups have much higher risk for cardiovascular disease than whites.¹⁷

Economic Impact of Chronic Disease

Chronic diseases cost the United States in both lives and dollars. However, research conducted by the Partnership for Solutions has shown that preventing disease and complications and promoting wellness can be cost-effective and save money.

- In 2001, 83 percent of all U.S. health care spending was for people with chronic conditions, as shown in Figure 2.
- 96 percent of Medicare spending and about 83 percent of Medicaid spending is for people with chronic conditions.
- Average per capita spending on people with one or more chronic conditions is five times greater than spending on people without any chronic conditions—\$4,398 compared to \$850.¹⁸



Chronic diseases cost the United States in both lives and dollars. However, research conducted by the Partnership for Solutions has shown that preventing disease and complications and promoting wellness can be cost-effective and save money.

Economic Benefits of Wellness and Prevention

Wellness programs in the workplace have been shown to result in significant cost savings through reduced health care costs, reduced short-term sick leave and increased productivity. For example:

- Delaware implemented a pilot study of its *Health Rewards* program, which examined the fitness of 100 randomly selected state employees. The employees were offered health assessments, feedback and fitness prescriptions. By the end of the study, officials estimated the program had saved the state more than \$6,200 per employee. In September 2004, the pilot program was expanded to 1,500 employees. Officials estimate the expansion will save the state health insurance plan almost \$1 million annually.
- Over two years, Citibank saved \$8.9 million on wellness and prevention programs that cost only \$1.9 million. This translates into a return of \$4.70 for every dollar spent on the wellness program.¹⁹
- Motorola reported \$3.93 saved for every dollar invested in its wellness program. In 2000, this translated into savings of nearly \$6.5 million. Motorola also showed that:
 - Participating employees saw a nominal 2.5 percent increase in annual aggregate health care costs, compared with an 18 percent annual aggregate increase for nonparticipants.
 - Nearly \$10.5 million was saved annually in disability expenses compared with non-participants.²⁰
- Johnson & Johnson's Health and Wellness Program is credited with saving \$8.5 million per year from 1990–1999.²¹

Why Should Legislators Intervene?

State policymakers will continue to face increased political pressure from constituents to balance funding social and health services for those most in need with operating and funding efficient and accountable government services. As legislators balance state budgets, they experience these opposing forces when providing for health services. In recent years, policymakers at all levels of government have seen health care costs rise. Subsequently, they have had to set priorities for funding.

Unless steps are taken to address the root causes of chronic diseases and their costs, the increased cost trends are expected to worsen. If proper attention is not paid to these issues, more and more of federal and state budgets, as well as the gross domestic product,²² will go toward treating those with chronic illnesses. To make best use of limited health care and public resources, policymakers at all levels will need to adjust health care budgeting and spending to promote wellness and healthy behaviors to prevent disease and move away from the limited focus of treating acute illness.



Defining Terms

Wellness

Wellness is defined as “a healthy state of being, free from disease.” However, current day use refers more to “the condition of good physical and mental health, especially when maintained by proper diet, exercise and habits.”

Source: *The American Heritage Stedman Medical Dictionary, 2002.*

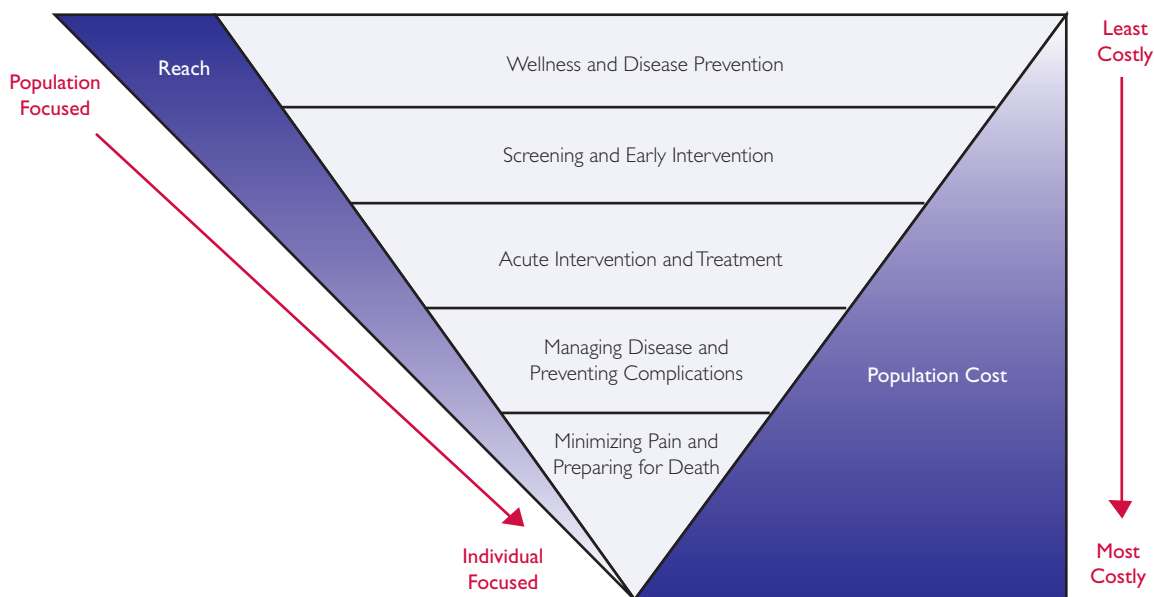


Stemming the Tide of Disease through Wellness and Healthy Behaviors

Wellness, based on health promotion or disease prevention, is an achievable goal for the nation. Wellness initiatives address tobacco avoidance and cessation, physical activity, a healthy diet, and efforts to follow recommendations to control cholesterol and blood pressure and obtain health screenings. They focus on promoting these behaviors to individuals and improving the living and working environments in which individuals make choices.

Promotion of wellness and healthy behaviors, more than any other interventions, has the potential to reach the most people at the lowest cost. Figure 3 shows the relationship between population-based wellness and disease prevention methods, the number of people that can be reached and cost. At each level on this continuum, the cost increases while the number of people reached decreases. For policymakers facing budget constraints, the need to balance costly treatments with prevention creates difficult decisions. However, if the investment in prevention is not made, more dollars will go toward only treating those who are very ill, an effort with the smallest chance of preventing complications and expensive treatments.

Figure 3. Population Impact vs. Cost at Various Levels of Health Care Intervention



Source: Michael P. Fierro, Health Services Research and Management Group, Bearing Point, Inc.

The five components of wellness described below are scientifically proven to prevent disease or its complications. All Americans can achieve wellness by engaging in these healthy behaviors and policymakers can encourage healthy behaviors by making investments in supportive policies and programs including:

- Avoiding tobacco use and secondhand smoke;
- Eating healthful foods and staying physically active;
- Controlling blood pressure and cholesterol;
- Obtaining appropriate health screenings; and
- Promoting healthy behaviors among children and adolescents.

The relationship of these risk factors to preventing specific chronic diseases is presented in Appendix B in greater detail. The primary related chronic diseases are:

- Cardiovascular Disease: Heart Disease and Stroke
- Cancer
- Diabetes
- Arthritis
- Obesity
- Oral Health Problems

Avoiding Tobacco Use and Secondhand Smoke

Snapshot

While the United States has made significant progress in reducing tobacco use, it still has much more to do. Using tobacco products has long been the leading cause of preventable death in the United States. Approximately 80 percent of adult smokers started smoking before age 18, and each day an estimated 2,000 young people become daily cigarette smokers. Currently, 45.4 million adults in the United States smoke cigarettes.²³ Avoiding tobacco can have positive long-lasting and far-reaching effects. California has shown a reduction in a variety of chronic conditions associated with tobacco prevention efforts at the state and local levels.^{24, 25, 26}

Protects Against

Heart Disease, Cancer (selected types), Lung Disease, Stroke and Gum Disease.

Approximately 80 percent of adult smokers started smoking before age 18, and each day an estimated 2,000 young people become daily cigarette smokers. Currently, 45.4 million adults in the United States smoke cigarettes.²³





Tobacco Use and Secondhand Smoke Facts

Tobacco use results in:

- Approximately 440,000 deaths annually, \$75 billion in direct medical costs and another \$80 billion to \$92 billion per year from lost productivity.²⁷
- On average, 3.3 million years of potential life lost for men and 2.2 million years for women between 1997 and 2001. Smoking, on average, reduces adult life expectancy by approximately 14 years.²⁸
- The deaths annually of an estimated 523 male infants and 387 female infants whose mothers smoked during pregnancy.²⁹
- Serious illness among nearly 9 million Americans.³⁰
- Premature death for over 5 million children living today.³¹
- Secondhand smoke exposure, which will cost the U.S. an additional \$10 billion a year.³²
- A substantial increase in the risk of developing gum disease. Smokers have seven times the risk of nonsmokers.³³ Smokers also are more than twice as likely to lose all their teeth, compared to people who have never smoked.³⁴

Power of Prevention

- Stopping the use of tobacco is the most cost-effective method of preventing chronic disease among adults.³⁵ Each smoker who successfully quits reduces total anticipated medical costs associated with heart attack and stroke by an estimated \$47 in the first year and \$853 during the following seven years.³⁶
- An economic assessment found that a health care insurance plan's annual cost of covering treatment to help people quit smoking ranged from 89 cents to \$4.92 per smoker, whereas the annual cost of treating smoking-related illness ranged from \$6 to \$33 per smoker.³⁷
- California experienced 33,000 fewer deaths from heart disease from 1989 through 1997 following its tobacco control efforts.³⁸ During this time, rates of lung cancer among men declined more rapidly in California than in other parts of the country, and rates of lung cancer among women in California declined, while they continued to increase elsewhere.³⁹
- Following the establishment of the Massachusetts Tobacco Control Program, state rates of smoking during pregnancy dropped sharply, from 25 percent in 1990 to 13 percent in 1996.⁴⁰
- Eliminating smoking during pregnancy may lead to a 10 percent reduction in all infant deaths and a 12 percent reduction in deaths from perinatal conditions.⁴¹
- A rapid reduction in heart attacks was reported recently following the implementation of a comprehensive local clean indoor air ordinance in Helena, Mont. In fact, this community noted a 40 percent decline in the number of hospital admissions for acute myocardial infarctions during the six months this ordinance was in place, a rate which rebounded when the ordinance was suspended.⁴²

Engaging in Physical Activity and Eating Healthy Foods

Snapshot

Two factors have received much attention recently in the media coverage of obesity: physical activity and diet. Regular physical activity and healthy eating are cornerstones in promoting wellness and preventing disease. Because these factors are linked with so many chronic diseases—such as obesity, cancer, cardiovascular disease and diabetes⁴³—wellness cannot be addressed without discussing the importance of being physically active and eating healthy foods.

An estimated 65 percent of American adults (130 million) are overweight, while 30 percent (60 million) over age 20 are obese.⁴⁴ In 1991, no states reported obesity rates at or above 20 percent. Today, however, approximately 35 states have obesity rates above 20 percent. In nine of these states, at least one-quarter of adults are obese.⁴⁵

Protects Against

Heart Disease, Cancer (selected types), Stroke, Diabetes, Oral Health Problems and Arthritis

Physical Activity and Healthy Eating Facts

Despite the proven benefits of physical activity, more than 50 percent of American adults do not get enough physical activity to provide health benefits and 26 percent are not active at all in their leisure time. Activity decreases with age, and sufficient activity is less common among women than men and among those with lower incomes and less education. Insufficient physical activity is not limited to adults. More than a third of young people in grades 9–12 do not regularly engage in vigorous physical activity, and 75 percent are not getting enough moderate physical activity. Daily participation in high school physical education classes dropped from 42 percent in 1991 to 28 percent in 2003.⁴⁶

Less than one-quarter of U.S. adults and young people eat the recommended five or more servings of fruits and vegetables each day. Additionally, in the last 30 years, Americans have been consuming many more calories than before.⁴⁷ In 2002, Americans spent almost half their total food budget on food away from home, an increase from 27 percent a generation ago.⁴⁸ Food eaten away from home tends to be higher in calories than food prepared at home.⁴⁹

Power of Prevention

- A sustained 10 percent weight loss will reduce an overweight person's lifetime medical costs between \$2,200 and \$5,300 by lowering costs associated with hypertension, type 2 diabetes, heart disease, stroke and high cholesterol.⁵⁰
- If 10 percent of adults began a regular walking program, \$5.6 billion in heart disease costs could be saved.⁵¹

Less than one-quarter of U.S. adults and young people eat the recommended five or more servings of fruits and vegetables each day.



Controlling Blood Pressure and Cholesterol

Snapshot

Uncontrolled blood pressure and cholesterol are the two major risk factors associated with two of our nation's top killers—heart disease and stroke. Controlling blood pressure and cholesterol are necessary to control high costs for health care, prescription drugs and long-term care related to these diseases.

Protects Against

Heart Disease, Stroke and Diabetes complications

Blood Pressure and Cholesterol Facts

Recent data indicates that nearly one-third of U.S. adults have high blood pressure (hypertension), and another 31 percent have prehypertension. In 2002, more than 106 million people were diagnosed with above normal or high total blood cholesterol levels. Additionally, data shows that more than 80 percent of people with high blood cholesterol do not have it under control.⁵²

Power of Prevention:

- Intensified blood pressure control can cut health care costs by \$900 (in 2000 U.S. dollars) over the lifetime of a person with type 2 diabetes. It can also extend life by six months.⁵³
- An average reduction of just 12 to 13 mmHg in systolic blood pressure over four years of follow-up is associated with a 21 percent reduction in coronary heart disease, a 37 percent reduction in stroke, a 25 percent reduction in total cardiovascular disease deaths and a 13 percent reduction in overall death rates.⁵⁴
- A 10 percent reduction in serum cholesterol levels can result in a 30 percent reduction in the incidence of heart attacks and strokes.⁵⁵
- U.S. adults substantially lowered their blood pressure, high cholesterol levels and other heart disease risk factors during the 1980s. As a result, U.S. costs associated with coronary heart disease declined by an estimated 9 percent—from about \$240 billion in 1981 to about \$220 billion in 1990.⁵⁶



Defining Terms

Hypertension is an “arterial disease in which chronic high blood pressure is the primary symptom or abnormally elevated blood pressure.”

High blood pressure for adults is defined as a systolic pressure of 140 mmHg or higher, or a diastolic pressure of 90 mmHg or higher.

Normal blood pressure is a systolic blood pressure less than 120 mmHg and a diastolic blood pressure less than 80 mmHg.

Prehypertension is defined as a systolic blood pressure of 120–139 mmHg or a diastolic blood pressure of 80–89 mmHg. People with prehypertension are at increased risk to progress to hypertension.

High Cholesterol for adults is defined as blood cholesterol greater than or equal to 240 mg/dL.

Sources: The American Heritage Stedman's Medical Dictionary; High Blood Pressure Fact Sheet, Centers for Disease Control and Prevention, 2005. *Trends in Cholesterol Screening and Awareness of High Blood Cholesterol—United States, 1991-2003*. Centers for Disease Control and Prevention. *Morbidity and Mortality Weekly Report* 54(35);865-870.



Screening for blood sugar in people with risk factors for diabetes and simple checking of feet and eyes in diabetics can prevent costly and debilitating complications.



Obtaining Recommended Health Screenings

Snapshot

The U.S. Preventive Services Task Force has established many recommendations to improve health and prevent disease or complications based on scientific evidence.⁵⁷ To prevent chronic diseases and their complications in populations and in individual medical treatment, many screening recommendations have been established for cancer, blood pressure, cholesterol, diabetes and other diseases and risk factors. Screening for colorectal, breast and cervical cancers can reduce illness and death through early detection of cancers and pre-cancers. Screening for blood sugar in people with risk factors for diabetes and simple checking of feet and eyes in diabetics can prevent costly and debilitating complications. Yet many adults are not getting regular lifesaving screenings as recommended.

Health Screening Facts

The U.S. Preventive Services Task Force (USPSTF) recommends:

- Screening for men and women aged 50 and older for colorectal cancer. The two colorectal screening methods used are the fecal occult blood test and flexible sigmoidoscopy. Both are effective at reducing colorectal cancer mortality.⁵⁸
- Performing mammograms on women aged 40 and older every one to two years.⁵⁹
- Screening women who have been sexually active every three years for cervical cancer.⁶⁰
- Regular monitoring of long-term blood sugar control and cholesterol for diabetics should also include traditional eye exams, foot exams and kidney damage monitoring.⁶¹

Power of Prevention

- Routine screening can reduce the number of people who die of colorectal cancer by as much as 60 percent or more.⁶² Screening for colorectal cancer extends life at a cost of \$11,890 to \$29,725 per year of life saved.⁶³

- A mammogram every one to two years can reduce the risk of dying of breast cancer by approximately 20 to 25 percent over 10 years for women aged 40 or older.⁶⁴
- In just five years, a foot care program can save \$900 (in 2000 U.S. dollars) in health care costs for a person with diabetes who has had foot ulcers. Such care prevents amputations.

Promoting Healthy Behaviors for the Young

Snapshot

Habits formed during childhood and adolescence are critical to how young Americans will advance into adulthood and whether they develop chronic diseases later in life. Many American youth are developing behaviors—tobacco use, unhealthy eating and physical inactivity—that may contribute to developing some of the top killers: heart disease, cancer and diabetes. Preventing or reducing these behaviors can help young people avoid serious health problems now and as they enter adulthood.

Youth Tobacco Use and Secondhand Smoke Facts

Each day, approximately 3,900 young people between the ages of 12 and 17 start smoking cigarettes in the United States. Each day an estimated 1,500 people in this age group become daily cigarette smokers in this country. Although the percentage of high school students who smoke has declined in recent years, rates remain high: 22 percent of high school students report current cigarette use (smoked at least one cigarette in the last 30 days).⁶⁵

- Studies show that 80 percent of adult smokers started before their 18th birthday. Smoking harms nearly every organ of the body, causing many diseases and reducing quality of life and life expectancy. The younger people begin smoking cigarettes, the more likely they are to become strongly addicted to nicotine.⁶⁶
- More than 6 million youth are exposed to secondhand smoke daily and more than 10 million youth aged 12–18 live in a household with at least one smoker.⁶⁷
- Secondhand smoke exposure during childhood may increase lung cancer risk as an adult, and can cause new cases of asthma or worsen existing asthma.^{68, 69}

Youth Physical Activity and Healthy Nutrition Facts

Currently, 16 percent of 6- to 19-year-olds are considered overweight, and an additional 15 percent are considered at risk of becoming overweight. Despite the proven benefits of physical activity and healthy eating for overweight and chronic disease prevention, many young people are not participating in enough physical activity or establishing healthy eating habits. For example:

- 33 percent of high school students did not participate in sufficient amounts of moderate or vigorous physical activity in 2003.⁷⁰
- The percentage of high school students who attended physical education classes daily decreased from 42 percent in 1991 to 28 percent in 2003.⁷¹
- 38 percent of high school students report watching television (a sedentary behavior) three or more hours per day on an average school day.⁷²
- Almost 80 percent of young people do not eat the recommended number of servings of fruits and vegetables.⁷³
- Less than 40 percent of children and adolescents meet the U.S. dietary guidelines for saturated fat.⁷⁴
- During the last 25 years, consumption of milk, the largest source of calcium, has decreased 36 percent among adolescent females.⁷⁵

Meanwhile, vending machines, school stores, canteens and snack bars continue to be available in almost half (43 percent) the nation's elementary schools, three-quarters (74 percent) of middle schools, and 98 percent of high schools.⁷⁶ Items commonly sold include chocolate and other kinds of candy, salty snacks not low in fat, and soft drinks, sports drinks or fruit drinks that are not 100 percent juice.^{77, 78, 79}



Power of Prevention

Research has shown that school health programs can effectively reduce the prevalence of health risk behaviors among young people and can also have a positive impact on students' academic performance. The following findings demonstrate the effectiveness of school health programs.

- A tobacco use prevention program reduced by about 26 percent the number of students who started smoking cigarettes in grades 7–9.⁸⁰
- School-based education programs in conjunction with community- and media-based anti-tobacco activities can postpone or prevent smoking onset in 20–40 percent of adolescents.⁸¹
- Based on an economic analysis of a successful middle school-based obesity prevention program that included health, physical education and healthy eating promotion, schools could prevent 1.9 percent of female students from becoming overweight for approximately \$14 per student per year. As a result, society could expect to save an estimated \$15,887 in health care costs and \$25,104 in loss-of-productivity costs.⁸²

Beyond Prevention: Care and Treatment for Those With Chronic Diseases

For many Americans, preventing disease is not an option. For the millions who already suffer from chronic diseases such as heart disease, cancer, stroke, diabetes, obesity, arthritis and a variety of oral health conditions, public health practitioners and policymakers must go beyond prevention. However, that does not mean wellness is out of reach. For those who already have a chronic disease, preventing complications and reducing the risk of further illness through disease management are the keys to wellness.

Power of Prevention

- Outpatient training to help people self-manage their diabetes prevents hospitalizations. Every \$1 invested in such training can cut health care costs by up to \$8.76.⁸³
- The Arthritis Self-Help Course, developed at Stanford University, is a six-week course that teaches people how to manage their arthritis and lessen its effects. Arthritis pain declined by 20 percent and costly physician visits were reduced by 40 percent among people who completed the course. Unfortunately, less than 1 percent of Americans with arthritis participate in such programs and courses are not offered in all areas of the United States.⁸⁴



Defining Terms Disease Management

“A system of coordinated health care interventions and communications for populations with conditions in which patient self-care efforts are significant.”

*Source: Disease Management Association of America.
Press Release, March 1, 1999.*



Disease Management

Studies have shown that people with chronic illnesses like diabetes, hypertension and other long-term diseases use a disproportionate share of medical services. These patients frequently are treated by multiple providers and their care is not coordinated, potentially leading to duplicative and unnecessary services and driving up medical expenses.

Disease management is an integrated approach to health care delivery that seeks to improve health outcomes and reduce health care costs.⁸⁵ Disease management has a variety of components, but programs generally involve one or more of the following:

- Identifying patients with a particular chronic or acute condition or set of conditions, who are enrolled in a monitoring program;
- Establishing a coordinated system of intervention and information-sharing for enrolled patients and their providers;
- Encouraging health care providers to use evidence-based practice guidelines when treating chronic illnesses;
- Educating patients to manage their conditions well and avoid disease complications; and
- Monitoring quality of care and outcomes over time to ensure the program achieves its desired goals.

Disease management is not only a tool to prevent chronically ill patients from further disease and costly treatments; it also engages patients in their own care, which frees precious health care resources. Nationally, the Centers for Medicare & Medicaid Services (CMS) has been conducting pilot studies on disease management and is encouraging states to implement disease management for Medicaid enrollees to help chronically ill patients better manage their diseases, improve health outcomes and lower medical costs.⁸⁶ CMS also covers screenings and physical exams through the Medicare program including: a *Welcome to Medicare* visit that includes screenings, cardiovascular screening, mammograms, Pap test and pelvic exam, colorectal cancer screening, prostate cancer screening, diabetes screening and supplies, self management training and glaucoma tests.⁸⁷

Conclusion

All levels of society—policymakers, chief executives and families—are grappling with the costs of health care. Experts predict that by 2014, health care will consume about 18.7 percent of the gross domestic product,⁸⁸ up from less than 10 percent in 1980. All levels of government and the private sector have examined ways to contain or shift these costs to various parts of the health care system. However, more attention is now being paid to the real drivers: costly and disabling chronic diseases.

The best ways to begin to slow the growth of health care costs are to promote wellness and prevent disease, and to manage the care of those with chronic diseases so they are as healthy as possible and can avoid complications and costly emergencies.

Policymakers can support programs to encourage healthy behaviors, provide screenings and referrals for treatment, and provide management for those with chronic diseases to keep them as healthy as possible. Policymakers will need to balance the priorities of funding wellness programs with funding care and treatment for those who are already ill. By establishing wellness policies and programs, legislators will contribute to better control of expenses for the growing number of Americans affected by chronic diseases.



Chapter Two
Who are key players in wellness and what are their roles?

Chapter Two

Who are key players in wellness and what are their roles?

Promoting wellness and controlling the tide of chronic diseases will require efforts from all levels of society and government, as well as businesses, communities and families. Every player has a role and responsibility—policymaking, health care purchasing, providing health insurance, educating the public, regulating business and health care, and individuals engaging in behaviors that are conducive to health.

In this chapter, the roles of key players are described:

- State, federal and local government
- Nongovernmental entities
 - employers and businesses
 - health care industry
 - schools, colleges and universities
 - media
 - nonprofit, advocacy, faith-based and membership organizations
- Individuals

Additionally, more detailed descriptions of governmental agency roles are found in Appendix C.

State Government

State governments are charged with the authority and responsibility for protecting the public's health. Within their boundaries, governors and health officials in most states have broad powers to quarantine, isolate, monitor and contain infectious illnesses. They also have responsibility for protecting the health of their residents, which means preventing chronic disease. Another reason states are promoting wellness and seeking to prevent disease is the significant impact these conditions can have on productivity, available workforce, health care costs and state budgets.

Many agencies within state government are involved in promoting wellness and healthy lifestyles. While these roles vary from state to state, many of these functions are consistent and have counterparts at the federal and local levels. Figure 4 shows the major roles and responsibilities of specific federal agencies and sample state and local agencies that deal with wellness-related services. State policymakers direct these efforts through legislative funding and program initiatives, executive orders and policy directives, and by advocating for change.

State legislators serving on Finance, Budget, Appropriations, Health and Human Services, Agriculture and Education committees have policy and programmatic oversight of executive branch wellness-related activities. Legislators are critical to the oversight of the use of public dollars in the agencies listed in Figure 4 and impose performance goals on agencies and agency officials.

Federal Government

The federal government is responsible for health promotion and education, detection of disease and health trends, research and regulation, and implementing national policies that encourage economic growth and stability. These responsibilities are fulfilled by the agencies described below. Additionally, federal policymakers guide these responsibilities through Congressional action on authorities and appropriations and through executive direction from the White House and the Cabinet.



State governments are charged with the authority and responsibility for protecting the public's health.

Figure 4: Roles of Various Executive Branches of Government in Wellness

Public Health Role or Responsibility	Executive Branch Agencies with Responsibility		
	Federal Level	State Level	Local Level
<ul style="list-style-type: none"> Conduct research and surveillance on risk factors and diseases Educate the public, school children and relevant professionals about wellness issues Provide funding for services at the state and local level 	<ul style="list-style-type: none"> U.S. Dept. of Health and Human Services Centers for Disease Control and Prevention National Institutes of Health Centers for Medicare and Medicaid Services Food and Drug Administration U.S. Dept. of Agriculture (USDA) 	<ul style="list-style-type: none"> Dept. of Health/Public Health Dept. of Agriculture Dept. of Education 	<ul style="list-style-type: none"> Dept. of Health/Public Health School Districts Office of the City Manager
<ul style="list-style-type: none"> Regulate health care, food, drug and other wellness-related industries 	<ul style="list-style-type: none"> Centers for Medicare and Medicaid Services U.S. Dept. of Agriculture Food and Drug Administration 	<ul style="list-style-type: none"> Dept. of Health/Public Health Dept. of Agriculture Boards of Medicine and Pharmacy State Licensing Boards Public Employee Insurance Agency 	<ul style="list-style-type: none"> Dept. of Health/Public Health
<ul style="list-style-type: none"> Oversee environments and planning that affect physical activity Purchase health care for employees, retirees and their dependents 	<ul style="list-style-type: none"> U.S. Dept. of Transportation U.S. Dept. of the Interior U.S. Park Service 	<ul style="list-style-type: none"> U.S. Dept. of Transportation Dept. of Roads and Highways 	<ul style="list-style-type: none"> U.S. Dept. of Transportation City and County Planning Dept. of Parks & Recreation
<ul style="list-style-type: none"> Subsidize or provide tax and other incentives to organizations and individuals Drive market forces that affect wellness 	<ul style="list-style-type: none"> Federal Employee Health Benefits Plan—Office of Personnel Management 	<ul style="list-style-type: none"> Dept. of Administration & Finance Dept. of Human Resources 	<ul style="list-style-type: none"> City/County Employee Benefits

Local Governments

Local governments and communities themselves play important roles in promoting wellness. Locally-controlled services, infrastructure and environments touch residents every day. For example, many local health departments provide safety-net disease prevention and health care treatment services, monitor local communities for diseases and risk factors, and convene community coalitions directed to improving health. Local policymakers, including mayors, councils and commissions, set policy on land use, infrastructure, tobacco use in public places, availability of nutritious foods and countless other policies that affect local resident wellness.

By supporting community campaigns and surroundings that promote wellness, local agencies and policymakers can improve the health of their hometowns and their neighbors. These same actions can promote the economic health of communities and states by supporting economic development through a more livable community and by supporting programs to prevent costly chronic diseases that are consuming state budgets.

Community-based public-private partnerships are also powerful local change agents. With support from local businesses, many communities promote wellness. Some partnerships focus on bringing the community together through events such as concerts, festivals and neighborhood cleanups. Others provide better physical activity opportunities, such as walking trails, improved parks or new community centers. Partnerships with businesses also can support the availability of nutritious foods through placement of fresh food markets, through partnerships with schools or even by providing preventive services in the community. The possibilities are enormous. With private partners providing support, communities have an opportunity to work together and take on their own health issues.

Employers and Businesses

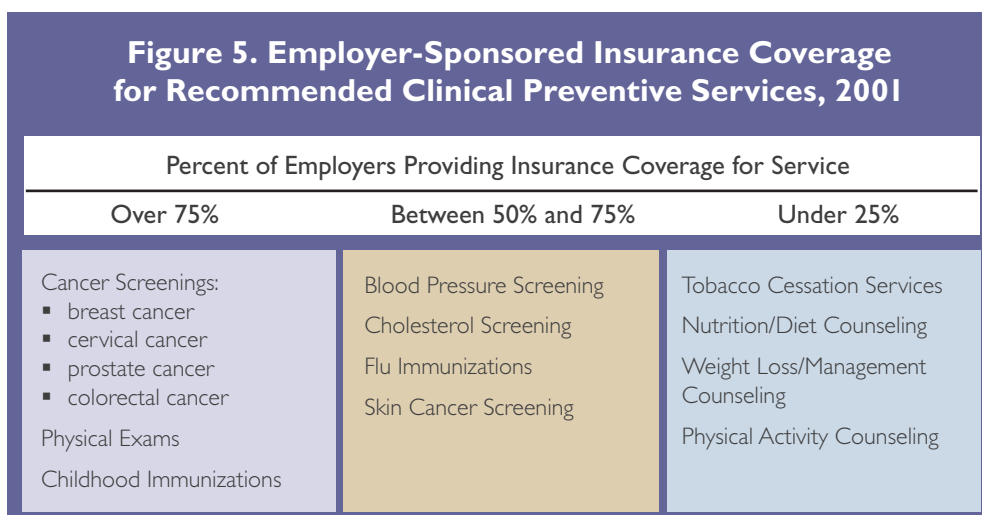
Employers as Purchasers of Health Insurance and Sponsors of Worksite Wellness

Businesses and employers play a key role in addressing chronic diseases and achieving wellness. Employers—like state, federal, and local governments—are the primary purchasers of health insurance for many workers in the United States. Employers are paying higher insurance premiums to cover much of the increased health care costs attributable to obesity and chronic diseases in their workforce. In addition, their premiums also indirectly subsidize medical care provided to the uninsured by their health care providers, whose costs are inflated to cover unreimbursed costs of care for the uninsured.⁸⁹ Finally, businesses are suffering from lost productivity and absenteeism due to employees' poor health and disabilities.

Employers and U.S. businesses have responded to increased health care and workforce costs by shifting from solely funding treatment of chronic diseases through health benefits to also funding prevention of these diseases. While the majority of U.S. employers have not yet adopted coverage for all of the recommended preventive health services, expanded coverage for prevention is steadily increasing.

A 2001 national survey revealed significant gaps in coverage for clinical preventive services in employer-sponsored health insurance plans, as shown in Figure 5. Important and effective clinical preventive services to address the most prevalent chronic diseases are not covered at the same rates as other services. For example, tobacco cessation counseling is a well-established clinical preventive service; however, it was not covered by more than 80 percent of employers' plans. Other important services to prevent and treat chronic diseases were covered by less than 25 percent of employer-sponsored plans, including nutrition counseling, weight loss and management counseling, and physical activity counseling.⁹⁰

Community-based public-private partnerships are also powerful local change agents.



Source: Partnership for Prevention/William M. Mercer National Survey of Employers, 2001. Published in the January/February 2006 edition of the *American Journal of Health Promotion*

Specific steps that employers and businesses have been taking to promote employee wellness include:

- Educating employees and other beneficiaries about healthy behaviors and making company insurance benefits available to achieve good health;
- Providing employees with health insurance-related financial and nonfinancial incentives to be physically active, maintain or attain a healthy weight and eat healthful foods;
- Implementing worksite wellness programs for employees;
- Improving the work environment to encourage healthy behavior, such as:
 - Supplying healthful foods in vending machines and cafeterias,
 - Implementing workplace nutrition policies and serving healthier foods at work-sponsored events and meetings,
 - Renovating stairwells to make them more attractive for regular use,
 - Prompting employees to use the stairs instead of the elevator, and
 - Providing pedometers to employees to track and encourage walking, jogging and running.

Businesses have also joined together to assure that the medical care they pay for through health insurance is high quality and promotes wellness. General Electric, Procter & Gamble, Ford, UPS, Verizon and others in 2002 began sponsoring “Bridges to Excellence,” where health care providers are rewarded when they meet goals for high quality care.⁹¹ Large employers have integrated wellness with other employee support programs.



Examples of Corporate Wellness Initiatives

3M Company—Supports fitness centers and health education programs, as well as yoga and massage therapy, as part of an employee retention strategy in some locations.⁹²

Abbott Laboratories—On-site wellness combines basic prevention such as screenings for high blood pressure, elevated cholesterol and breast cancer; flu vaccinations; on-site fitness centers, fitness fairs and physical therapy services; healthy menus and nutrition counseling; education on health and pregnancy-related topics; and child care support to reduce stress for working mothers.⁹³

General Motors—Integrated employee information and support as part of employee health insurance, which was expanded to include weight loss programs, and offering high-risk employees opportunities to participate in research studies to potentially reduce risk of breast cancer.⁹⁴



Businesses as Manufacturers of Wellness-Friendly Foods

The agriculture and food industry supports wellness through food options. The industry has begun to increase healthy food options where consumer demand has been strong. Sales of bottled water have grown significantly, as have sales of prepackaged salad ingredients. Additionally, food producers, suppliers, vendors and related government agencies have sought to improve health, consumer knowledge and consumption of locally-grown produce in recent years through a variety of interventions. Fast-food restaurant chains have introduced a variety of healthier options, such as salads, fruit and grilled chicken. Wendy's, McDonald's and other fast-food companies have begun responding to changing consumer tastes by offering healthy options in "value meals" and apples and fruit juice in children's meals. These companies also have begun marketing some of their healthy options to consumers through mass media.

Health Insurance Industry and Health Care Providers

Increasingly, health care insurers, payers, hospital systems, physicians and other professionals are promoting wellness and disease prevention to deal with increased numbers of ill patients and soaring costs for treatment.

Similar to state, local and federal governments that pay for health insurance, private health insurers and payers are struggling to keep pace with health care innovations, increased costs and a growing number of chronically ill beneficiaries. Many have begun health promotion or wellness initiatives for the covered individuals to respond to these increased challenges, initiating:

- Community or large-scale educational initiatives including community-based weight loss programs, employer-based worksite wellness programs and physical activity promotion in schools;
- Disease management programs that cover screenings, physical activity and nutrition counseling;
- Expanded coverage of treatments that aggressively promote wellness, such as weight loss drugs and surgical treatments;
- Health coaching and health risk appraisals;
- Online programs to track progress and provide incentives toward meeting health goals, such as smoking cessation or weight loss; and
- Evaluation of these approaches to develop the best ways to control chronic diseases.⁹⁵

Insurers are taking a more comprehensive approach. For example, Blue Cross and Blue Shield⁹⁶ nationally has implemented a combination of programs to keep its covered individuals, employers and providers up-to-date, including:

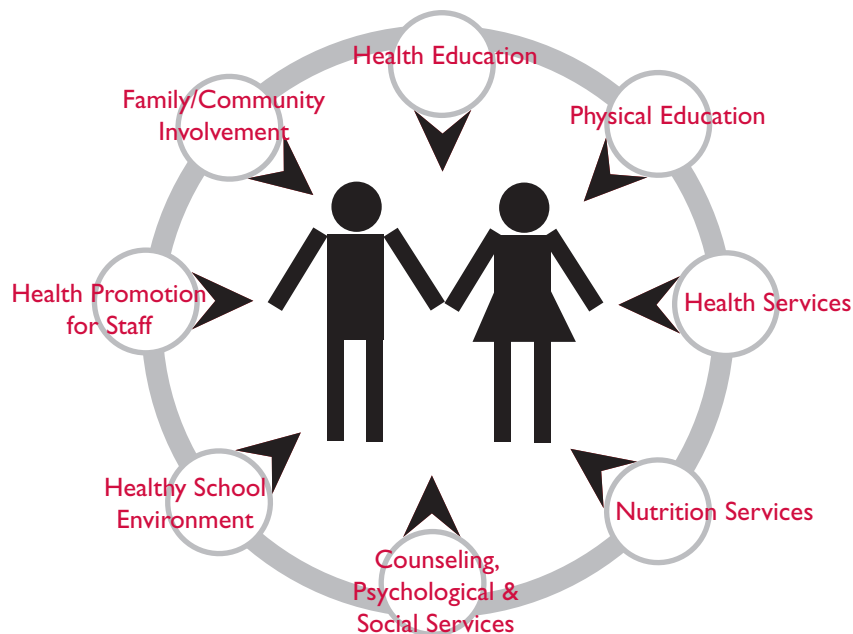
- A “Walking Works” program that helps individuals set their personal goals for weight loss, increased activity or smoking cessation;
- A Web site that explains how individual choices for medical care have an effect on premiums and co-payments;
- Technical information on studies to reduce costs of care and evidence-based evaluation of new technologies; and
- A patient-customized health information system that is accessible only by the patient and his/her physician.

Additionally, health insurers are creating payment incentives and educational programs for physicians and health care providers to integrate wellness and evidence-based prevention initiatives into their primary medical care services. For example, at Kaiser Permanente, body mass index is measured at every patient visit to give physicians useful data on patients’ weight and its risks for chronic disease. Hospitals and health care systems, which have long conducted health screening special events as a service to their communities, are integrating prevention and screenings into the acute care services they provide.

Schools, Colleges and Universities

At all levels of the educational system—elementary, secondary or postsecondary—a school’s primary role is educating students. However, education includes far more than just reading, math and science. Schools also play a critical role in promoting wellness for children and school employees by providing health education and a healthy environment that promotes learning. In the United States, 53 million young people attend school and more than 95 percent of children aged 5 to 17 are now enrolled in school. This means that schools are not only a logical partner in wellness, they are also the only institutions that can reach nearly all youth. Because of this, schools are in a unique position to improve both the education and health status of young people throughout the nation.⁹⁷ Schools create an environment in the community that affects not only youth, but also faculty, staff, families and entire neighborhoods.

Figure 6: Coordinated School Health Relationships



Source: Centers for Disease Control and Prevention, Division of Adolescent and School Health, 2005



Schools also play a critical role in promoting wellness for children and school employees by providing health education and a healthy environment that promotes learning. In the United States, 53 million young people attend school and more than 95 percent of children aged 5 to 17 are now enrolled in school.

By creating healthy school environments, schools and administrators can play a key role in wellness. Key wellness issues for a healthy school environment include promoting healthy eating, increasing physical activity and preventing and stopping smoking—all essential to preventing chronic diseases and promoting wellness.

Coordinated School Health (CSH) is one tool to achieve wellness and create a healthy school environment. CSH integrates the efforts of and helps parents, students, school personnel and community leaders. The health needs of students and staff are addressed through a coordinated approach to all the services provided and the environment of the schools. While every program is unique to local community needs, the components depicted in Figure 6 represent typical school programs and services to promote the health and safety of students, their families and school staff.

This approach can help achieve school and child wellness by focusing on children's life-long health habits, preventing risk factors and ultimately promoting longer, healthier lives. For example, many states support healthy school environments by:

- Supporting and/or mandating physical activity and education in schools;
- Making schools accessible to the community, including safe walking and biking routes and access to school spaces for community use;
- Providing nourishing foods, minimizing unhealthy food choices and teaching about healthy eating;
- Establishing a tobacco-free environment at all times, by student, staff and visitors on all school property, in school vehicles and at all school-sponsored events;
- Supporting or mandating tobacco-use prevention in schools and providing access to tobacco cessation programs for students and staff;
- Encouraging sun-safety messages at schools and in the curriculum; and
- Providing school-based health clinics that address medical and dental care.

Colleges and universities are also key players in promoting wellness. They are typically communities within communities that affect students, faculty, staff and surrounding towns or cities. Institutions of higher learning serve as a critical bridge between high school and the working world for many young people. Providing an environment where young adults can learn to be healthy while preparing to enter the job market is an opportunity to promote wellness.

Media

The news media and communications channels serve as important partners in promoting wellness and communicating with the public and policymakers about health messages. Today there are many more media outlets than ever before, with traditional outlets such as television, newspaper and radio expanding to include satellite, cable, Internet and mobile technologies. Most people who are online have searched for health information and a growing number of individuals are posting their opinions and thoughts about many issues, including health, on Web logs. The media can promote public awareness about wellness and convey accurate information about healthy habits. As partners in wellness promotion, they can highlight local or national success stories.

Nonprofit, Advocacy, Faith-Based and Membership Organizations

The institutions described in this section all function within a dynamic democratic system and a diverse service delivery environment. Organized constituencies or memberships have many roles to play in promoting wellness, including:

- Advocating national, state and local policies that affect wellness;
- Implementing wellness programs and policies;
- Educating the public and creating awareness of health and wellness issues;
- Raising funds to support wellness efforts; and
- Providing direct patient and community services to prevent and control chronic diseases.

The combination of service to the community and contribution to democratic discourse make these organizations invaluable to policymakers and the people they serve. By understanding the environment of concerned organizations, policymakers can build coalitions that promote wellness in states.

The Individual

The final and probably most important decision makers on wellness are the individuals responsible for making their own healthy lifestyle choices. While government, businesses, employers, schools and communities can establish broad priorities and set policy to support healthy individual behavior, individuals ultimately must make decisions and take actions that ensure their own wellness. Policy opportunities abound to combine efforts to accomplish a cultural change in America and to get every person to take personal responsibility and become educated about eating healthfully, being physically active, following the care and treatment set out by their physicians, getting screened for diseases and risk factors where possible and actively engaging in behaviors and activities to support their own wellness.

Conclusion

Participation from all levels of society is needed to create a healthy America. Many levels of government, the private sector and communities are engaging in promoting wellness. Each of these key players has a unique role and responsibility for creating and implementing policies supporting wellness, whether in school, by the federal government or in a state-house.

Likewise, each of the above entities engages in purchasing health care and providing health insurance to Americans. They can ensure that wellness is available to their employees or constituents. Every part of American society can take advantage of the opportunities to learn about wellness and how to make healthy choices.

In addition, government—federal, state and local—has the burden and responsibility of regulating business and health care. Through regulation or legislation, government can support wellness by providing incentives to encourage companies to implement wellness programs and be good business partners.



Chapter Three
What are states doing to achieve wellness?

Chapter Three

What are states doing to achieve wellness?

State government has many interrelated responsibilities: employer, insurer, regulator and guardian of public monies, protector and promoter of a vibrant economy, and steward of the public's health. States are both employers and insurers and have become very involved in promoting and achieving wellness. As employers, states are struggling with health care and insurance costs due to chronic diseases and are suffering from lost productivity and absenteeism due to employees' poor health and disabilities.

As stewards of the public's health and public tax dollars, state policymakers have a responsibility to balance investments in entitlement programs and policies with those that support economic growth. Controlling costs of employer-sponsored health insurance plans supports economic growth and will be increasingly difficult as the costs of treating chronic illnesses escalate. The costs of health insurance benefits are already high—averaging nationally \$9,950 annually per employee for family coverage. Controlling the impact of chronic diseases is paramount if the U.S. is to maintain a healthy economy. As major employers in the country, states are not immune from the rising costs associated with chronic diseases. They have begun promoting wellness and supporting the private sector in its efforts to improve their employees' health.

States have implemented a variety of wellness programs over the last few years, and this chapter highlights the efforts of nine gubernatorial initiatives—in Arkansas, Delaware, Kentucky, North Dakota, Ohio, Oklahoma, Rhode Island, South Dakota and Vermont—to promote wellness. By and large, these initiatives are statewide executive actions with educational components that focus on physical activity, healthy eating and avoiding tobacco use.

To date, legislators have focused attention primarily on schools and children and less on adults, businesses or worksites. In the 2005 legislative season:

- 13 statehouses considered bills to implement physical education requirements or programs in schools;
- 11 states reviewed legislation to implement body mass index or obesity education campaigns; and
- Eight states examined legislation dealing with vending machines and the content that can be sold in them in schools.

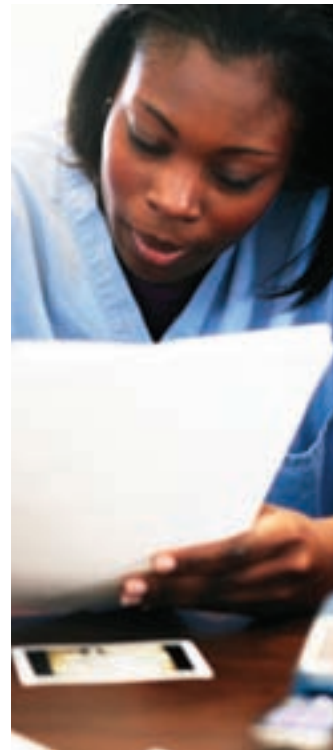
However, there are many options available to legislators seeking to assist businesses and workers in promoting good health and addressing health care costs.

State Governments as Employers

State governments, like employers and businesses, have responded to increased costs by shifting from primary coverage for treating chronic diseases to also include disease prevention. Some states approach health issues, such as obesity and smoking, in worksite wellness programs by focusing largely on improving nutrition and promoting physical activity and smoking cessation. Employers that promote wellness can potentially:

- Reinforce and encourage employees to maintain healthy behaviors;
- Encourage employees to take an active role in their personal health;
- Reduce health insurance and health care costs;
- Reduce employees' use of short-term sick leave; and
- Increase employee productivity.

State governments, like employers and businesses, have responded to increased costs by shifting from primary coverage for treating chronic diseases to also include disease prevention.



State Employee and General Population Wellness Initiatives

Many states have initiated wellness programs focused on either statewide population or state employees. While each program is unique, most have a core set of elements that include tobacco prevention and/or cessation, physical activity promotion, nutrition education and healthy eating promotion, blood pressure and cholesterol control assistance, health screenings and monitoring, and disease management. Many states that have adopted a general population approach to wellness include a worksite or employee wellness component to their program. Some examples are shown in Figure 7 below.

Figure 7: State Executive Branch Initiatives to Promote Wellness

State	Type of Program	Key Wellness Program Components	Brief Description
South Dakota	State Employee	<ul style="list-style-type: none"> ▪ Physical Activity ▪ Healthy Eating ▪ Health Screenings ▪ Disease Management 	<i>Healthy South Dakota</i> is a statewide wellness program that assists members in setting goals to become more physically fit and healthier by maintaining their own personal diary and monitoring their success in the program. Key components: a Web site, tool kits and incentives for participating employees.
Delaware	State Employee	<ul style="list-style-type: none"> ▪ Physical Activity ▪ Healthy Eating ▪ Health Screenings ▪ Disease Management 	<i>Health Rewards program</i> is a pilot study of the fitness of 100 randomly selected state employees. The employees were offered health assessments, feedback and fitness prescriptions. By the end of the study, officials estimated the program had saved the state more than \$62,000.
Kentucky	State Employee	<ul style="list-style-type: none"> ▪ Tobacco Avoidance ▪ Physical Activity ▪ Healthy Eating ▪ Health Screenings ▪ Disease Management 	<i>Employee Health Insurance</i> includes wellness initiatives and incentives for employees to make healthy lifestyle choices. Key components: discounts on premiums for nonsmokers, health risk assessments and health education.
Oklahoma	State Employee	<ul style="list-style-type: none"> ▪ Tobacco Avoidance ▪ Physical Activity ▪ Healthy Eating 	<i>Strong and Healthy Oklahoma Initiative</i> emphasizes state employee wellness programs and encourages all Oklahomans to adopt healthy habits.
Rhode Island	State Employee	<ul style="list-style-type: none"> ▪ Physical Activity ▪ Healthy Eating ▪ Tobacco Avoidance ▪ Physical Activity 	<i>Get Fit, Rhode Island</i> encourages greater physical activity. The program is managed by the Department of Health and the University of Rhode Island and provides resources, including expertise from the departments of exercise physiology, nutrition, behavior modification, nursing and health psychology. This is a comprehensive program designed to get all state employees involved in wellness.



Figure 7: State Executive Branch Initiatives to Promote Wellness, cont.

State	Type of Program	Key Wellness Program Components	Brief Description
Arkansas	General Population/ Statewide	<ul style="list-style-type: none"> ▪ Healthy Eating ▪ Control Blood Pressure and Cholesterol ▪ Health Screenings ▪ Disease Management 	<p><i>Healthy Arkansas</i> is aimed at improving the health of Arkansans through physical activity, nutrition and avoiding tobacco. The program provides information on health topics such as obesity, body mass index, nutrition, diabetes, physical activity and quitting smoking.</p>
North Dakota	General Population/ Statewide	<ul style="list-style-type: none"> ▪ Tobacco Avoidance ▪ Physical Activity ▪ Healthy Eating 	<p><i>Healthy North Dakota</i> supports North Dakotans in making healthy choices by focusing on wellness and prevention—in schools, workplaces, senior centers, homes and anywhere people live, work and play.</p>
Ohio	State Employees; General Population/ Statewide	<ul style="list-style-type: none"> ▪ Tobacco Avoidance ▪ Physical Activity ▪ Healthy Eating 	<p><i>Healthy Ohioans—Small Steps, Big Strides</i> is a multi-year, statewide initiative to increase awareness of the importance of healthy lifestyles and to change unhealthy habits into healthy ones. Key components: Governor’s Buckeye Best Healthy Schools Awards Program and the Governor’s Healthy Ohioans Business Council</p>
Vermont	General Population/ Statewide	<ul style="list-style-type: none"> ▪ Physical Activity ▪ Healthy Eating ▪ Reducing Obesity ▪ Disease Management ▪ Tobacco Avoidance 	<p><i>Prescription for a Healthy Vermont</i> was implemented in 2005 by Gov. Jim Douglas to address multifaceted health concerns in Vermont. Key components:</p> <ul style="list-style-type: none"> ▪ <i>Fit & Healthy Kids</i> encourages children to eat fruits and vegetables, provides opportunities for students to be active, and gives grants for communities to create recreational areas such as playgrounds or ball fields. The Governor’s Awards program recognizes exceptional local schools. ▪ <i>The Vermont Blueprint for Health</i> aims to improve the outcome for those with chronic diseases by educating them on how to take a more active role in their health care. ▪ <i>Fit and Healthy Vermonters</i> focuses on reducing obesity and improving nutrition by beginning community walking programs, encouraging physicians and insurance companies to follow the Chronic Care Model and developing a patient registry for chronic diseases. ▪ Governor’s Commission on Healthy Aging

State Legislation Supporting Wellness

In 2005, state legislatures considered hundreds of bills that dealt with wellness, its key components or related chronic diseases. Figure 8 summarizes bills that were considered and passed by state legislatures. Many of these bills focused on children and schools and were related to physical education, nutrition standards, vending machines and bullying. Other bills that passed dealt with issues such as body mass index awareness, school wellness programs, creating screening programs for various cancers, requiring health insurance coverage for recommended health screenings and violence prevention curricula.

Figure 8: 2005 Legislative Initiatives on Wellness and Health Promotion
(legislation passed, except where noted)

Wellness Topic	Summary of Legislative Action	State and Bill Number
Physical Activity	Thirteen states considered bills to implement physical education (PE) or PE standards in schools, and eight states passed those bills. Physical exercise during school—Specifies minimum amount of vigorous physical activity each day through class instruction, recess or physical education; physical education standards or urging schools to provide physical activity programs for students.	Kentucky SB 172 Virginia SB 1130 South Carolina HB 3499 Oklahoma SB 312 Virginia HJR 260 Utah HCR 3034 Pennsylvania HR 57 Kansas SB 154
Obesity	Eleven states considered bills dealing with body mass index or obesity. One state passed legislation implementing an awareness program in schools. Body Mass Index Awareness and Education-BMI education program in schools.	Tennessee HB 445
Physical Activity and Healthy Eating	Two states considered comprehensive physical activity; healthy eating and obesity prevention or worksite wellness legislation and both passed these bills. Requires comprehensive program of nutrition education, standards for all food available at schools, confidential BMI testing program and minutes of physical activity required for all grade levels K-12. School district wellness programs should be implemented, which increases physical activity and encourages healthy choices.	Maine SB 263 Kentucky HB 90
Worksite Wellness	One state considered tax incentives for employers to provide wellness incentives to employees. Allows corporation business tax credit and gross income tax credit for employer expenditures to provide certain physical fitness benefits to employees.	New Jersey A3715 (S484)
Healthy Eating	Seventeen states considered bills dealing with nutritional standards in schools or related nutrition studies. Nine states passed legislation requiring standards to be adopted or studies to be conducted. Nutritional standards in schools—Requires the Department of Education to develop nutrition guidelines for foods and beverages sold or served on school grounds during the school day; demonstration projects; conducting studies of nutrition and nutrition standards, or ensuring schools provide locally grown produce.	Arkansas SB 965 Arizona HB 2544 South Carolina HB 3499 Kentucky SB 172 Kansas SB 154 New Mexico HB 61 West Virginia HB 2816 Colorado SB 81 Montana HJR 17
Healthy Eating	Eight states considered bills dealing with vending machines and four passed legislation restricting items sold by vending machines. Vending Machines in Schools—Bills requiring the adoption of policies that establish a minimum percentage of items sold in vending machines to meet certain nutritional standards; increase sales or provision of dairy products, or generally restricting certain types of food and beverages from vending machine sales.	West Virginia HB 2816 Kentucky SB 172 North Carolina SB 961 South Carolina HB 3499



Figure 8: 2005 Legislative Initiatives on Wellness and Health Promotion, cont.
 (legislation passed, except where noted)

Wellness Topic	Summary of Legislative Action	State and Bill Number
Health Screenings	<p>Several states considered legislation establishing programs or insurance coverage mandates for nationally recommended health screenings. Proposed legislation relating to cancer screening and prevention efforts, includes:</p> <ul style="list-style-type: none"> ▪ Skin cancer prevention in schools ▪ Funding for colorectal screening programs ▪ Creating colorectal cancer program ▪ Requiring placing signs throughout state parks warning individuals about skin cancer: <p>Requires health insurance coverage—Proposed legislation relating to:</p> <ul style="list-style-type: none"> ▪ Requiring insurance coverage for cancer prevention and treatment, including providing colorectal screening as a standard of care, or provide coverage ▪ Requiring health benefit plan coverage for human papillomavirus (HPV) screening tests 	<p><i>Proposed</i> Arizona SB 1297 Arkansas HB 2323 Arkansas HB 2781 New York SB 5433/ HB 7422</p> <p><i>Proposed</i> Louisiana HB 36 Texas HB 1485</p>

Source: Netscan, a Thomson West Service, 2005

Conclusion

States, businesses and organizations are already investing in wellness and have created innovative approaches to preventing disease and its complications. Private employers and large corporations have begun to generate and analyze data from promising wellness programs. However, much of this work has been done without broad collaboration among various entities. Results from wellness programs and policies have not been thoroughly evaluated across all entities and results have not been widely disseminated. Many lessons can be learned from these interventions, and state results should be monitored to determine the most cost-effective interventions.



Chapter Four
What supports and challenges should policymakers consider about wellness initiatives?

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What supports and challenges should policymakers consider about wellness initiatives?

Like most issues related to health care, wellness has its share of controversy. These discussions are significantly informing and altering the public debate about industry responsibility, consumer responsibility for their own actions and the government's right to intervene in an individual's health matters, as well as funding concerns related to the uninsured and health care financing. So far, there are no definitive answers to all the questions raised by the multitude of constituencies, but there are many valid points. The descriptions here are intended to inform policymakers on the controversies relevant to and surrounding wellness.

Personal Responsibility, Government Responsibility and Consumer Choice

Costs for Medicaid, state employee and retiree health benefits, and other health care continue to rise due to higher rates of increased illness and subsequent increased use of health care, medications, medical technologies and long-term care. The resulting debate rages about the respective roles of personal responsibility, consumer choice and government intervention in consumer choice. Undeniably, individuals must be responsible for their own wellness. It is imperative that individuals, along with the government and business sectors, are part of creating a healthy workforce and healthy economy. Implications of these government roles are provided below.

- Employer—sustaining a highly productive, skilled and robust workforce that is innovative in the international and national marketplace. Employers have even greater challenges as they find ways to absorb higher medical care costs for a chronically ill workforce and recover lost productivity.
- Insurer—providing health care benefits to employees, retirees, their dependents and those on government-funded health care programs. As a payer of health care costs, the government is struggling with providing adequate levels of coverage as it controls rapidly increasing health care costs.
- Regulator—ensuring that the marketplace, specifically health care providers and health plans, are offering and providing high quality care and maintaining high standards of practice.
- Steward of public monies—ensuring that tax dollars and public resources are used in a practical, efficient and accountable manner.
- Steward of the public good—ensuring that resources are used for purposes that are broader than just economic or financial gain, and that the neediest are cared for.

The government's ability to protect and promote a vibrant economy could be hindered by an increasing amount of the national gross domestic product expected to be required to cover health care costs. Since many of these costs are associated with preventable chronic diseases, it is in the best interest of all levels of the government to promote wellness among employees and all citizens. Some believe that the government has a responsibility to promote wellness because of the significant societal burden caused by a chronically ill population. As part of our open market system, the government also must balance maintaining consumer choice, market freedoms and regulation with its need to protect and promote the nation's economic health.



Undeniably, individuals must be responsible for their own wellness. It is imperative that individuals, along with the government and business sectors, are part of creating a healthy workforce and healthy economy.

While food companies have begun to offer healthier foods to Americans, individuals are still choosing unhealthy diets and not meeting dietary recommendations.



Working with Industry

As state policymakers continue on the path of wellness, they are likely to encounter opposing views. Over the past several years, opposition has been most noticeable between two industries that are related to the field of wellness: tobacco and food. These industries should not automatically be considered adversaries because of the critical role they play in the national economy. Tobacco and agriculture/food industries are discussed specifically in this section, since they have been major focuses of policymakers and the media.

Tobacco Issues

While tobacco prevention and control efforts have been most visible over the last 15 years, the contribution of tobacco use to disease, disability and death is still tremendous. Tobacco sales represent a multi-billion dollar industry and continue to harness tremendous power in the United States and global economy. There are no safe tobacco products. Since the 1998 Master Settlement Agreement (MSA) between the states and the tobacco companies was executed, many limits were set on marketing tobacco products to children through traditional advertising methods. However, state policymakers should be aware of secondary marketing methods that may be reversing or hampering public health efforts to prevent tobacco use and its consequences.

Agriculture, Food and Nutrition Issues

Agriculture and food industries are critical parts of the U.S. economy and are equally critical partners in achieving wellness among Americans. Two major issues have been discussed over the last few years: lack of healthy options offered by the food industry and poor dietary choices by Americans. Obviously, in a market economy these two drivers cannot be completely separated; they are interdependent. While food companies have begun to offer healthier foods to Americans, individuals are still choosing unhealthy diets and not meeting dietary recommendations. In 2002, Americans spent almost half of their total food budget on food away from home, an increase from 27 percent in 1962. Food eaten away from home has traditionally tended to be higher in calories than food prepared at home. However, American food companies, including fast-food chains, have begun responding to consumer demand and changing tastes by offering healthier options.

While no federal laws require fast-food chains and restaurants to label foods to better educate consumers, states have begun to implement such laws. State policymakers have many options in supporting a healthy agricultural economy while balancing the needs of their residents' health. While the majority of recent food policy attention has focused on schools, state policymakers can provide more food content information to consumers, implement higher nutritional standards in government food programs and support local agriculture by promoting fruits and vegetables grown in state.

The federal government invests billions of dollars in the agriculture sector. The money is channeled partly through state governments and partly to farmers. Jurisdiction and responsibility for nutrition assistance programs, food stamp programs, the Women, Infant, and Children (WIC) program, and national nutrition guidelines rest with the U.S. Department of Agriculture. However, states implement these programs locally, so state policymakers have tremendous influence on the quality and reach of the programs' efforts. Improving American diets requires both addressing supply, through agriculture and food policy, and creating demand—through making eating healthful foods everyone's individual responsibility.

Investment of Resources for Long-Term Benefit

As states begin to assess the range of policy and programmatic possibilities to improve health and promote wellness, it is important to discuss cost implications and measure the effects of new policies and programs. Over the past few years, states have seen high health care costs and withering tax revenues. That picture is beginning to look brighter. However, policymakers correctly are examining programs and policies that will quickly and efficiently improve health status and reduce costs. There is no data on the cost benefit of some wellness interventions or policies, such as removing vending machines from schools. However, many wellness programs are likely to save money in the long term, though the benefactor of those savings is unclear. Some programs and policies may be cost saving or even generate revenue.

Many studies from private sector wellness programs demonstrate the cost effectiveness and cost savings of wellness initiatives. Studies on tobacco use reduction programs and policies showed cost savings within 15 years, despite original projections that cost savings wouldn't be seen for more than 20 years.

This leaves policymakers with difficult decisions on state budgeting and spending. Wellness and prevention programs and policies, like other investments such as roads and waterways, cost money up front. Although data showing their value or return on investment is not readily available for all interventions, the data is becoming available in shorter timeframes than previously anticipated.

In addition to costs, measuring the effectiveness of the policies and programs is another important consideration. Many measurements used in the media are health outcomes, such as reducing obesity or cancer incidence. However, these metrics are not useful for shorter timelines, such as two or four years. For policymakers, indicators of health behavior changes that can be measured on shorter timelines are available. For example, in the recent focus on obesity, it has not been possible to change individuals' weight across a population in a few short years. Therefore, a proxy measure of policy effectiveness could be measuring the extent of change in healthy behaviors, such as increased physical activity or healthier diet selections.



Cost Saving Versus Cost Effective

It is important to note that cost-effectiveness and cost-saving are often misused or frequently confused.

- Cost-saving interventions save enough money in later costs to offset the initial investment in the intervention.
- Cost-effective interventions require fewer resources to achieve health improvements or benefits compared to other interventions, but may or may not save money.

Source: Partnership for Prevention. *What Policymakers Need to Know About Cost Effectiveness Fall 2001*, p.4.

Challenges Presented by Disease and Risk Factor Specific Programs

Funding for programs to address wellness, including chronic disease prevention and control, has developed unevenly over time because of the scientific data available, political forces and current events. Figure 9 shows current CDC funding to states for major chronic disease prevention programs. Additional details on CDC funding for these programs are found in Appendix D. States also use general funds, tobacco settlement funds, foundation support and other resources to establish and enhance these and related programs.

Specific issues and diseases tend to create an advocacy community dedicated to its prevention and cure. National and state funding levels often are influenced by the advocacy efforts of a constituency with interest in a specific disease or risk factor, such as tobacco use prevention or breast cancer. Since constituencies for various diseases and risk factors vary in size, scope and strength, program funding levels grow accordingly. Often, policymakers' interests are similarly focused, leading to specific funding and programs to address the needs identified by constituents. For example, in 1990, Congress created the National Breast and Cervical Cancer Early Detection Program, and over the years increased resources to allow this program to be implemented in all 50 states. Based on a strong constituency and champions among national policymakers, this program grew faster than other cancer programs and faster than other chronic disease programs. Other programs, such as CDC's heart disease and stroke prevention program, developed more incrementally.

The advantage of these strong constituencies and intense policymaker interest is that specialized programs can be built, which ultimately contribute to building states' capacity to address wellness more broadly. In addition, specialized programs allow the public health system to:

- Expand knowledge of how to prevent and control specific diseases;
- Create specialized expertise and capacity in public health programs;
- Monitor specific health conditions for better public health planning and programming;
- Develop best practices for interventions that affect people's health; and
- Measure specific outcomes related to a disease or risk factor, such as death rates, disease rates, screening rates or risk behavior rates.

Figure 9. CDC Grants to States for Chronic Disease Prevention and Control, FY 2005

Disease/Risk Factor Funding	Number of States Receiving Grants
Diabetes	50
Breast and Cervical Cancer	50
Tobacco	50
Cancer Registries	45
Arthritis	36
Heart Disease and Stroke	32
Nutrition/Physical Activity/Obesity	28
Coordinated School Health	23
Oral Health	12

Note: Within programs, funding levels vary from state to state.

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. <http://www.cdc.gov/nccdphp>

Still, the resulting federal/state funding scheme is a patchwork of state programs for addressing the leading causes of death and disability. States often find that they cannot adequately address the continuum of wellness, disease prevention and control issues that would best serve the public's health—for example, they may have a heart disease and stroke program,



Traditionally, public and private health insurance has covered illness rather than wellness or disease prevention.

but no program to address the related risk factors of physical inactivity and poor nutrition.

Another challenge of having many specialized programs is the multiple administrative requirements states must meet for federal funding. States may find themselves convening multiple but related advisory committees, creating separate disease surveillance systems or duplicating staff groups to implement and meet specific program requirements. CDC and its state chronic disease programs are working collaboratively to streamline these program requirements and several states have identified promising practices for program integration.

State legislators play a key role in their states to support special programs for diseases or risk factors and to encourage integration of wellness programs. By understanding the benefits of these specialized programs, policymakers can help to expand needed capacity in their states and communities that can respond to local public health and constituent needs. By seeking opportunities to bring constituents together to support streamlined, integrated programs that maximize efficiency, policymakers can move toward integrated programs that address the full spectrum of wellness, prevention and disease control.

Health Care System Financing as a Barrier to Prevention

Traditionally, public and private health insurance has covered illness rather than wellness or disease prevention. While the system is changing, much more needs to be done. Population wellness cannot be achieved by simply providing health care services alone, but physicians and other health professionals must also play an important role in promoting wellness among their patients and in preventing and controlling chronic diseases. Clinical services have demonstrably lowered risk for or reduced the effects of specific diseases. These include immunizations, cancer screenings, high blood pressure and cholesterol detection and control, and screening for the complications of diabetes. Clinicians are also important counselors and motivators, providing information and access to services such as nutrition counseling, physical activity support and smoking cessation programs. Without access to these services, the continuum of wellness and prevention is broken. Those who are uninsured, who have limited prevention benefits, or who are not aware of their insurance benefits for prevention are at risk for missing this crucial element of wellness promotion.

The Uninsured and Underinsured

Almost 46 million Americans, or 16 percent, are uninsured. Between 2000 and 2003, the number of uninsured Americans increased by more than 5 million people. Many insured Americans only have limited coverage for costs in a catastrophic event. For those with such coverage, preventive services may seem like an unaffordable luxury or may fall low on the priority list of individual and family needs. The result can be unexpected costly illnesses or visits to emergency departments for treatment of illnesses that are not caught and treated early. These delays in receiving treatment can lead to a reduced quality of life and even premature disability and death.

Safety-net providers offer some relief and make preventive services available to individuals and their communities. Often, community health centers, migrant health centers, non-profit agencies, hospital outreach programs and school-based clinics provide these services at little or no cost. Still, those without an identified primary source of medical care have more difficulty making wellness and prevention part of their health care usage.

Coverage for Preventive Services

In recent years, coverage for preventive services has increased. Medicare and Medicaid have added a number of services to their benefit packages, and a number of states have mandated wellness coverage in the plans they regulate. Unfortunately, these benefits often go unused. For example, while use of Medicare breast cancer screenings is high for Medicare beneficiaries, use of the colorectal cancer screening benefit is low. The same can be said of many benefits provided through other insurance. So, merely providing coverage is not enough. People need to know that they have coverage for preventive services and be motivated to take advantage of the available preventive services available.

While many clinical preventive services are covered by insurance plans, those other than traditional medical interventions provided by physicians lag behind. Tobacco cessation services, nutrition and physical activity counseling are prime examples. A major clinical trial showed that people with pre-diabetes could reduce their chances of progressing to full diabetes either with a prescription drug or with supported nutrition and physical activity improvements. The drug was effective for 30 percent of patients, but the nutrition/physical activity intervention was effective for 60 percent, and it was the only intervention that returned blood sugar levels to normal ranges and worked for those over age 65. Yet, today, most insurance plans would cover the drug, but not the counseling. Although the cost is the same, our system continues to favor more traditional pharmaceutical interventions.

New forms of insurance are moving away from defined benefit packages. Consumer-driven health plans allow enrollees to use their medical savings to pay for any services that do not fall under an insurance policy that covers major medical expenses. These plans are new and it is not known what their effects will be on use of preventive services.

Diffusion of Science into Practice and Adherence to Guidelines

The nation has been slow to take up scientifically proven methods of prevention and health care practitioners have not universally adhered to recommended proven clinical guidelines. For many of the diseases and risk factors discussed in this guide, the clinical and scientific evidence was established decades before it was used routinely in clinicians' offices or implemented as policy initiatives. For example, abundant scientific evidence about the health hazards of smoking were available before the U.S. Surgeon General released the landmark 1964 report declaring smoking a serious public health hazard. After the evidence was released, it still took several decades before policymakers and the public seriously considered widespread action to combat tobacco use. Similarly, in the 1980s the scientific community established that mammograms and colonoscopies were effective screenings for early detection of breast and colon cancer. While policymakers invested in breast cancer screening through the National Breast and Cervical Cancer Early Detection Program in 1990, they have not similarly invested in colon cancer and its effective screening methods, which have largely been unfunded and unsupported.

Conclusion

Achieving wellness among all Americans is not a simple task. Many economic, environmental political and social factors are slowing progress toward a healthy population. State policymakers need to strike the right balance between government intervention and support





Achieving wellness will mean making tough spending choices, such as investing in workers and investing in prevention services, while continuing to innovate in health care and spur a vibrant economy.

for employers and individuals working to prevent costly diseases. Achieving wellness will mean making tough spending choices, such as investing in workers and investing in prevention services, while continuing to innovate in health care and spur a vibrant economy.

The United States is presented with a tremendous opportunity to capitalize and build upon current efforts to refocus our health care system from illness to wellness. The public health community, clinical practitioners and others involved in providing health care should continue to collaborate to create new wellness approaches, evaluate their effectiveness, and drive payers of health insurance and health costs to a wellness-focused model of health care. Research has identified interventions for the most prevalent chronic diseases and these can be more quickly adopted and implemented.

One critical piece of the health care puzzle is the uninsured. The uninsured typically have worse health outcomes than the insured population; however no long-term strategy has been adopted at the federal or state level to deal with this disparity. To achieve wellness, attention is needed for the most prevalent diseases and risk factors, and all those with roles in wellness as described in Chapter 2 need to be involved in educating and motivating individuals, payers and policymakers to evolve the health care system so that no person is left behind.

State policymakers can:

- Become champions for wellness in states and statehouses;
- Convene interested parties to develop and establish consensus on wellness goals for the state;
- Consider legislation to foster participation by businesses, state and local agencies, and communities to promote wellness and its key components;
- Engage allies and opponents in policy discussions to arrive at sensible and practical solutions to unique state economic, political, cultural and demographic conditions.
- Adopt proven health promotion and disease prevention programs and policies;
- Implement wellness initiatives for state employees and statewide for all residents;
- Engage the private sector to partner with state agencies on wellness;
- Provide incentives for businesses to continue to provide and expand worksite and employee wellness initiatives;
- Work with colleagues from other states to share ideas on successes, challenges and lessons learned;
- Invest in evaluating short- and long-term outcomes of wellness initiatives; and
- Seek more information from national organizations such as the Centers for Disease Control and Prevention, The Council of State Governments and other membership organizations. More sources for information are available in Appendix A.

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Appendices

Appendix A

Additional Resources

Appendix B

Chronic Disease Facts

Appendix C

Roles and Responsibilities of Various Government Agencies

Appendix D

CDC Funding to States for Chronic Disease Prevention

Appendix E

References for Appendices

Appendix A: Additional Resources

These resources were selected to provide more information for legislators about chronic illness, its costs, prevention methods and the health disparities faced by many Americans.

Governmental Agencies

- U.S. Department of Health and Human Services, www.hhs.gov
- Centers for Disease Control and Prevention, www.cdc.gov
- National Institutes of Health, www.nih.gov
- Centers for Medicaid and Medicare Services, www.cms.gov
- U.S. Department of Agriculture, www.usda.gov
- Agency for Health Care Research and Quality and U.S. Preventive Services Task Force, www.ahrq.gov
- Health Disparities Collaborative, www.healthdisparities.net

Nongovernmental Agencies

- American Association of Diabetes Educators, (AADE) www.aadenet.org
- American Diabetes Association, www.diabetes.org
- American Dietetic Association, (ADietA) www.eatright.org
- American Cancer Society, www.cancer.org
- American Heart Association, www.americanheart.org
- The Arthritis Foundation, www.arthritis.org
- The Guide to Community Preventive Services, www.thecommunityguide.org
- Partnership for Solutions, www.partnershipforsolutions.com
- Kaiser Family Foundation, www.kff.org
- The Robert Wood Johnson Foundation, www.rwjf.org

Appendix B: Chronic Disease Facts

By making lifestyle changes, people could dramatically cut their risks of developing such life-threatening diseases as cardiovascular disease, cancer, diabetes and obesity. Controlling risks that aggravate arthritis or lead to poor oral health also could help improve the quality of life for thousands. This appendix provides more detail for the information presented in Chapter 1, highlighting six diseases, the human toll each one takes, risk factors that could be modified and the economic impact of each disease.

Cardiovascular Disease—Heart Disease and Stroke

Heart disease is the leading cause of premature, permanent disability in the U.S. workforce.¹ In 2002, nearly 700,000 people died of heart disease (51 percent of them women), accounting for 29 percent of all U.S. deaths.²

Stroke is the third leading cause of death after heart disease and cancer and a leading cause of serious, long-term disability. In 2002, stroke killed 162,672 people (61 percent of them women), accounting for about 1 of every 15 deaths.

Why It Matters	The Human Impact	Risk Factors	Economic Impact
Heart disease and stroke—the principal components of cardiovascular disease—are the first and third leading causes of death for both men and women in the United States, accounting for nearly 40 percent of all deaths.	Every year, more than 927,000 Americans die of cardiovascular disease. ³ In addition, more than 70 million Americans (more than one-fourth of the population) live with a cardiovascular disease. More than 6 million hospitalizations each year are due to cardiovascular disease. ³	Modifiable risk factors that cause heart attacks and strokes include high cholesterol, high blood pressure, smoking and diabetes. Risk behaviors include obesity, poor diet and physical inactivity.	The cost of heart disease and stroke in the United States was projected to be \$394 billion in 2005, including health care expenditures and lost productivity from death and disability. ⁵

Cancer

“Cancer develops when cells in the body begin to grow out of control. Normal cells grow, divide, and die. Instead of dying, cancer cells continue to grow and form new abnormal cells. Cancer cells often travel to other body parts where they grow and replace normal tissue. This process, called metastasis, occurs as the cancer cells get into the bloodstream or lymph vessels. Cancer cells develop because of damage to DNA. Many times, DNA becomes damaged by exposure to something in the environment, like smoking.”⁶

Why It Matters	The Human Impact	Risk Factors	Economic Impact
Cancer, the second leading cause of death among Americans, is responsible for one of every four deaths in the United States.	In 2005, an estimated 570,000 Americans died of cancer. Close to 1.4 million new cases were diagnosed in 2005, the majority of which were preventable. ⁷	Cancer risk, prevalence and death are preventable by avoiding unhealthy behaviors such as tobacco use, physical inactivity, overweight and obesity, poor eating habits and sun exposure. ⁸	In 2003, the overall cost for cancer in the United States was \$189.5 billion including: <ul style="list-style-type: none"> ▪ \$64.2 billion for direct medical expenses; ▪ \$16.3 billion for lost worker productivity due to illness; and ▪ \$109 billion for lost worker productivity due to premature death.⁹

Diabetes

There are two main types of diabetes. Type 1 most often appears during childhood or adolescence. Type 2 diabetes, which is linked to obesity and physical inactivity, accounts for 90-95 percent of diabetes cases and most often appears in people older than 40. Type 2 has historically been referred to as “adult-onset,” however it is now being found at younger ages and is even being diagnosed among children and teens.¹⁰

Why It Matters	The Human Impact	Risk Factors	Economic Impact
<p>During 1980-2002, the number of people with diabetes in the United States more than doubled, from 5.8 million to 13.3 million.</p>	<p>Currently, more than 18 million Americans have diabetes and 5.2 million of these cases are undiagnosed.¹¹ Diabetes is the leading cause of new cases of blindness among adults aged 20-74 years.</p>	<p>Poor diet, physical inactivity and overweight are risk factors for diabetes, in addition to family history of diabetes. Diabetes can cause heart disease, stroke, blindness, kidney failure, pregnancy complications, lower-extremity amputations and deaths related to flu and pneumonia.</p>	<p>In 2002, diabetes cost the United States \$132 billion in total costs, including: \$92 billion in direct medical costs and \$40 billion in costs due to disability, work loss and premature death. The average annual health care costs for a person with diabetes is \$13,243, compared to a person without diabetes whose health care costs average \$2,560.¹²</p>

Arthritis

“Arthritis comprises over 100 different diseases and conditions. The most common are osteoarthritis, gout, rheumatoid arthritis, and fibromyalgia. Common symptoms include pain, aching, stiffness, and swelling in or around the joints. Some forms of arthritis, such as rheumatoid arthritis and lupus, can affect multiple organs and cause widespread symptoms.”¹³

Why It Matters	The Human Impact	Risk Factors	Economic Impact
<p>Arthritis is the leading cause of disability in the United States.¹⁴ Trends show that as the U.S. population ages, arthritis will increase dramatically. The number of people 65 or older who have doctor-diagnosed arthritis is projected to more than double, from 15.7 million in 2002 to 33.3 million in 2030.</p>	<p>43 million Americans have arthritis or other rheumatic conditions.¹⁵ Another 23 million people have chronic joint symptoms but have not been diagnosed with arthritis. Arthritis limits activities of more than 16 million adults. Each year, arthritis results in 750,000 hospitalizations and 36 million outpatient visits. While adults 65 or older have the highest risk of arthritis (58.8 percent), two-thirds of all people with arthritis are younger than 65.¹⁶</p>	<p>Research shows that physical inactivity, overweight and a history of joint injuries are risk factors for arthritis.</p>	<p>In 1997, the total cost of arthritis and other rheumatic conditions in the United States was \$86.2 billion. Of this total, \$51.1 billion were direct medical-related costs and \$35.1 billion were indirect costs or lost wages.¹⁷</p>

Obesity

Adult overweight and obesity are determined by using weight and height to calculate body mass index (BMI), which is related to body fat.^{18, 19} To avoid stigma, and because the formula for calculating overweight is different for children, the terms at-risk and overweight are used when referring to children and youth.²⁰

Why It Matters	The Human Impact	Risk Factors	Economic Impact
<p>65 percent, or 191 million American adults, are overweight, while 30 percent, or 60 million American adults over age 20, are obese.²² The percentage of young people who are overweight has more than tripled since 1960. Among children and teens aged 6-19 years, 16 percent (more than 9 million young people) are considered overweight.</p>	<p>In 1991, no states reported obesity rates at or above 20 percent. Today, approximately 35 states have obesity rates above 20 percent. In nine of these states, at least one-quarter of adults are obese.</p>	<p>Overweight and obesity are a result of consuming more energy—or food—than is burned through activity or exercise. Primary behavioral factors causing obesity are physical inactivity and poor nutrition. Lack of environmental supports for healthy choices in workplaces, communities and schools also may contribute to these risks.</p>	<p>Obesity costs \$117 billion annually, including \$61 billion in direct medical care costs for treatment of related diseases, plus \$56 billion in indirect costs, such as lost productivity.^{23,24} Health care costs increase by 36 percent and medication costs increase by 77 percent for an obese person compared to those at a healthy weight.²⁵</p>

Oral Health Problems

Oral health means more than healthy teeth and the absence of disease. It involves the ability of individuals to carry out essential functions, such as eating and speaking, well enough to contribute fully to society. It means not only being free of tooth decay and gum disease, but also chronic oral and facial pain conditions, oral and pharyngeal (throat) cancers, soft tissue lesions, birth defects such as cleft lip and palate, and scores of other diseases and disorders that affect the oral, dental and craniofacial tissues.²⁶

Why It Matters	The Human Impact	Risk Factors	Economic Impact
<p>Mouth and throat diseases, which range from cavities to cancer; cause pain and suffering for millions of Americans. Employed adults lose more than 164 million hours of work each year due to oral health problems or dental visits. The vast majority of these ailments can be prevented.</p>	<p>Tooth Decay in Children—Over one-quarter of children ages 2 to 5 are affected by tooth decay in their primary (baby) teeth. Tooth decay in the permanent teeth affects half of children ages 12 to 15, and two-thirds (68 percent) of adolescents aged 16-19 years. Tooth Decay in Older Adults—One-quarter of U.S. adults over 60 have lost all their teeth, primarily due to tooth decay and advanced gum disease. Oral Cancers—Each year, about 28,000 people learn they have mouth and throat cancers, and nearly 7,200 die of these diseases.²⁷</p>	<p>Lack of regular and early dental care, water systems that do not provide water with optimal fluoride levels, tobacco use and poor nutrition contribute to the development of oral health problems.</p>	<p>In 2002, the U.S. Centers for Medicare & Medicaid Services estimated that Americans spent approximately \$70.1 billion on dental services. This is a low estimate of the true cost of poor oral health because it does not account for indirect expenses of oral health problems, such as lost productivity, nor does it account for the cost of services by other health care providers.</p>

Appendix C: Roles and Responsibilities of Various Government Agencies

Promoting wellness and limiting the tide of chronic diseases will take a concerted effort at all levels of society, from the federal government and the health care industry to nonprofit groups and individuals. The following information provides more detail on the roles of state and federal programs included in Chapter 2.

State Government

State agencies that are key players in promoting wellness include:

Department of Health/Public Health

Departments of Health play a crucial role in examining the health of a state's residents, identifying public health problems and applying solutions such as health education, targeted campaigns to change behavior or increase awareness, culturally appropriate education programs, health screenings, data collection and program evaluation to identify successful interventions.

Department of Human/Social Services

Departments of Human and Social Services, and Medicaid agencies, in partnership with the federal Centers for Medicaid and Medicare Services, finance health care for low-income, disabled and other disadvantaged populations. Because Medicaid programs purchase health care for such a large population, they wield significant power over benefit options and packages in certain markets, as well as drive price and quality of services. In some states, purchasing for Medicaid is combined or coordinated with purchasing health benefits for state employees.

Department of Agriculture

Departments of Agriculture and Food regulate the local or state-grown food industry in cooperation with federal agriculture officials or U.S. Department of Agriculture. Several states' agriculture departments have the authority to regulate foods in schools and set nutrition policy in schools and other venues.

Departments of Administration, Personnel and Public Employee Benefits

Departments of Administration and Finance, Personnel and Public Employee Insurance agencies are key players in promoting wellness and reaching an important constituency group: state employees. As major purchasers of health insurance for state employees, these agencies oversee a large proportion of the health care costs and drivers for state employees, retirees and their dependents.

Department of Transportation

Departments of Transportation are the lead agencies for highway and road infrastructure projects. They also receive federal funding that affects urban and rural planning, development and placement of trails and sidewalks and other environmental supports that affect how physically active people are in a community.

Department of Parks and Recreation

Departments of Parks and Recreation are often overlooked agencies in the area of wellness. These agencies manage greenspace and recreation areas for the state and can be a partner in promoting active living through recreation.

Federal Government

Federal agencies that are examples of key players and how they support wellness are discussed below.

Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention (CDC) play a crucial role in supporting state programs aimed at promoting wellness. Through the National Center for Chronic Disease Prevention and Health Promotion, states receive funding to implement evidence-based prevention programs for chronic diseases and its risk factors. CDC conducts prevention research to identify these evidence-based practices and supports state-based health research of disease and risk factor trends. CDC guidelines for prevention are developed based on scientific evidence and research and form the cornerstone of state and local prevention programs.

Agency for Healthcare Research and Quality

The Agency for Healthcare Research and Quality (AHRQ) is the lead agency for health care quality and standards development. AHRQ sponsors the National Guideline Clearinghouse, a database of evidence-based clinical practice guidelines. The agency also supports U.S. and Canadian institutions that review clinical evidence and scientific literature that studies improvements in disease treatment, including chronic diseases. AHRQ also disseminates best practice information to practitioners through its Effective Health Care program. This program collects information on best clinical practices, analyzes it and translates the scientific evidence into practical solutions for practitioners.

National Institutes for Health

The National Institutes for Health (NIH) funds and conducts research to identify causes, treatments and prevention methods for chronic diseases and associated risk factors. This research provides the evidence base for clinical and public health interventions to promote wellness.

Centers for Medicare and Medicaid Services

The Centers for Medicare and Medicaid Services (CMS) finances health care for America's elderly, disabled and low-income populations. By paying for health care for those most affected by chronic diseases, CMS provides access to needed prevention, control and treatment services for millions. Its effect on health services goes beyond those they serve directly—CMS is an important regulator of health insurance and health services, and its purchasing and regulatory actions often drive private sector health care practices. CMS sets standards in Medicaid and Medicare that typically become the norm among state programs and other clinical practices.

Food and Drug Administration

The Food and Drug Administration (FDA) regulates labeling and other nutrition-related food issues. They also regulate pharmaceuticals that are used to prevent and control chronic disease.

Department of Agriculture

The U.S. Department of Agriculture (USDA) sets food policy for the nation's agricultural products and also for the nation's school food programs. Farm subsidy programs affect the nation's food supply and consumption, and certain nutritional labeling regulation also falls to USDA.

Department of Transportation

The Department of Transportation (DOT) provides funding, incentives and guidance to states that affect community design, walkability and bikeability. These responsibilities have an impact on community environments and how effectively they encourage physical activity.

Federal Employee Health Benefits Plan

The Federal Employee Health Benefits Plan (FEHB) provides health care insurance coverage for more than 9 million federal employees and their families,²⁸ and includes almost 250 distinct benefit plans.²⁹ As an employer and large purchaser of health insurance, the actions of this federal program can affect the remainder of the public and private health insurance marketplace.

Appendix D: CDC Funding to States for Chronic Disease Prevention

State	Chronic Diseases				Associated Risk Factors				
	Arthritis	Heart Disease and Stroke	Breast & Cervical Cancer	Diabetes	Tobacco	Nutrition & Physical Activity	School Health Programs	Oral Health	Comprehensive Cancer Control
Alabama	X	X	X	X	X	O	O	O	X
Alaska	X	X	X	X	X	O	O	X	X
Arizona	X	O	X	X	X	X	O	O	X
Arkansas	X	X	X	X	X	X	X	X	X
California	X	O	X	X	X	O	X	O	X
Colorado	X	X	X	X	X	X	X	X	X
Connecticut	X	X	X	X	X	O	O	O	X
Delaware	O	O	X	X	X	O	O	O	X
Dist of Columbia	O	X	X	X	X	O	O	O	X
Florida	X	X	X	X	X	X	X	O	X
Georgia	X	X	X	X	X	X	O	O	X
Hawaii	O	O	X	X	X	O	X	O	X
Idaho	X	O	X	X	X	O	O	O	O
Illinois	X	X	X	X	X	X	O	X	X
Indiana	X	O	X	X	X	O	X	O	X
Iowa	X	O	X	X	X	X	O	O	X
Kansas	X	X	X	X	X	O	X	O	X
Kentucky	X	X	X	X	X	X	X	O	X
Louisiana	O	X	X	X	X	O	O	O	X
Maine	O	X	X	X	X	X	X	O	X
Maryland	X	O	X	X	X	X	O	O	X
Massachusetts	O	X	X	X	X	X	X	O	X
Michigan	X	O	X	X	X	X	X	X	X
Minnesota	X	X	X	X	X	O	O	O	X
Mississippi	O	X	X	X	X	O	O	O	X
Missouri	X	X	X	X	X	X	O	O	X
Montana	O	X	X	X	X	X	O	O	X
Nebraska	X	X	X	X	X	O	O	O	X
Nevada	X	O	X	X	X	O	O	X	X
New Hampshire	O	O	X	X	X	O	O	O	X
New Jersey	O	O	X	X	X	O	O	O	X
New Mexico	X	O	X	X	X	X	O	O	X
New York	X	X	X	X	X	X	X	X	X
North Carolina	X	X	X	X	X	X	X	O	X
North Dakota	O	X	X	X	X	O	X	X	X
Ohio	X	X	X	X	X	O	O	O	X
Oklahoma	X	X	X	X	X	X	O	O	X
Oregon	X	X	X	X	X	X	X	X	X
Pennsylvania	X	O	X	X	X	X	O	O	X
Rhode Island	X	O	X	X	X	X	X	X	X
South Carolina	X	X	X	X	X	X	X	X	X
South Dakota	O	O	X	X	X	X	X	O	X
Tennessee	X	X	X	X	X	O	X	O	X
Texas	X	X	X	X	X	X	O	X	X
Utah	X	X	X	X	X	O	O	O	X
Vermont	X	O	X	X	X	X	X	O	X
Virginia	X	X	X	X	X	O	O	O	X
West Virginia	O	X	X	X	X	X	X	O	X
Wisconsin	X	X	X	X	X	X	X	O	X
Wyoming	O	O	X	X	X	O	O	O	X

Key:
X=funding O=no funding

Appendix E: References for Appendices

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The Healthy States Initiative helps state leaders access the information they need to make informed decisions on public health issues. The initiative brings together state legislators, Centers for Disease Control and Prevention (CDC) officials, state health department officials and public health experts to share information and to identify innovative solutions.

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