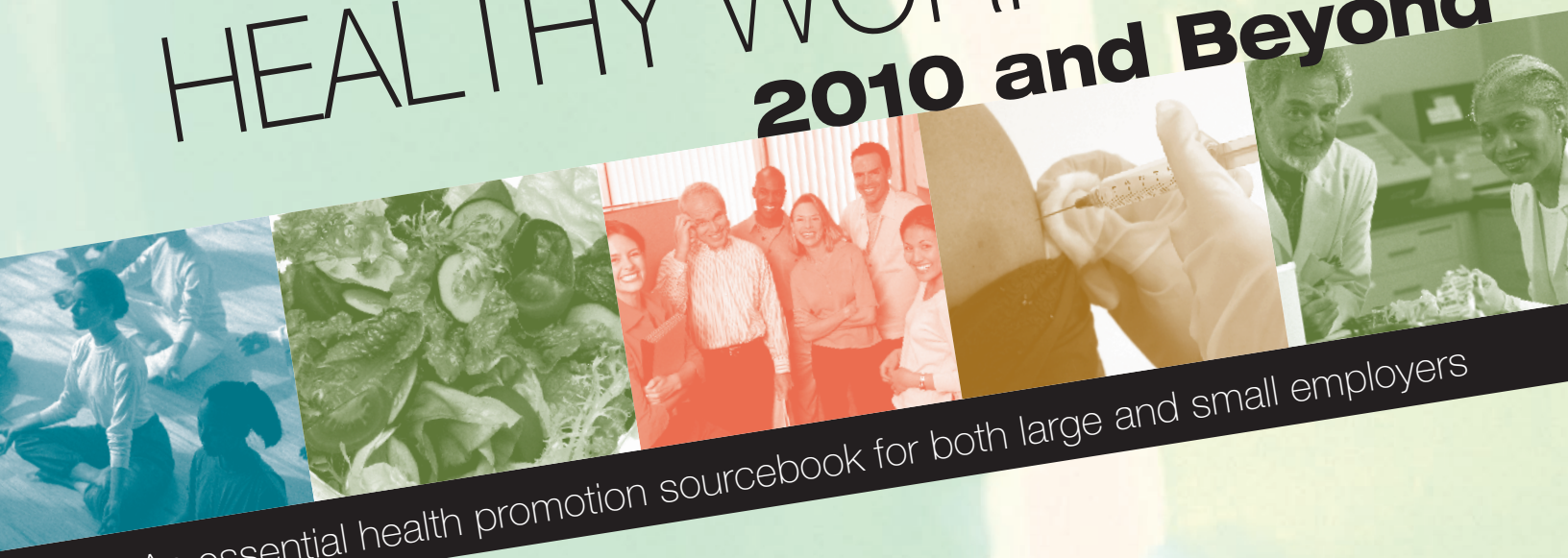
HEALTHY WORKFORCE
2010 and Beyond



An essential health promotion sourcebook for both large and small employers

Partnership for Prevention®
Shaping Policies • Improving Health

Labor, Immigration & Employee Benefits Division
U.S. Chamber of Commerce

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Partnership for Prevention and the U.S. Chamber of Commerce are working together to help create a healthier U.S. workforce.

We know that chronic diseases are significant drivers of health care costs, and that the majority of American employees have at least one chronic condition. Health management initiatives, including workplace health promotion/wellness programs, help employees live healthier lives while at the same time improving employers' bottom lines through reduced health costs and increased productivity. With this in mind, employee health programs and workplace health promotion programs should be viewed and managed as a strategic investment to be maximized rather than an expense to be minimized.

Because American businesses are the country's largest provider of health insurance, they are uniquely situated to provide leadership in finding solutions to address health care costs. Healthy Workforce 2010 and Beyond is an essential health promotion sourcebook for both large and small employers. We invite you to use this guide and its recommended resources to help plan, implement, and evaluate a comprehensive health promotion program aimed at improving employee health and business growth.

Sincerely,

Robert J. Gould, PhD
President and CEO
Partnership for Prevention®

Randel K. Johnson
Senior Vice President
Labor, Immigration, and Employee Benefits
U.S. Chamber of Commerce

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Introduction

Employee Health Promotion: A Total Health Management Strategy

Healthy People 2010 is a set of national health objectives, with 10 year targets. The overall goals of *Healthy People 2010* are to:

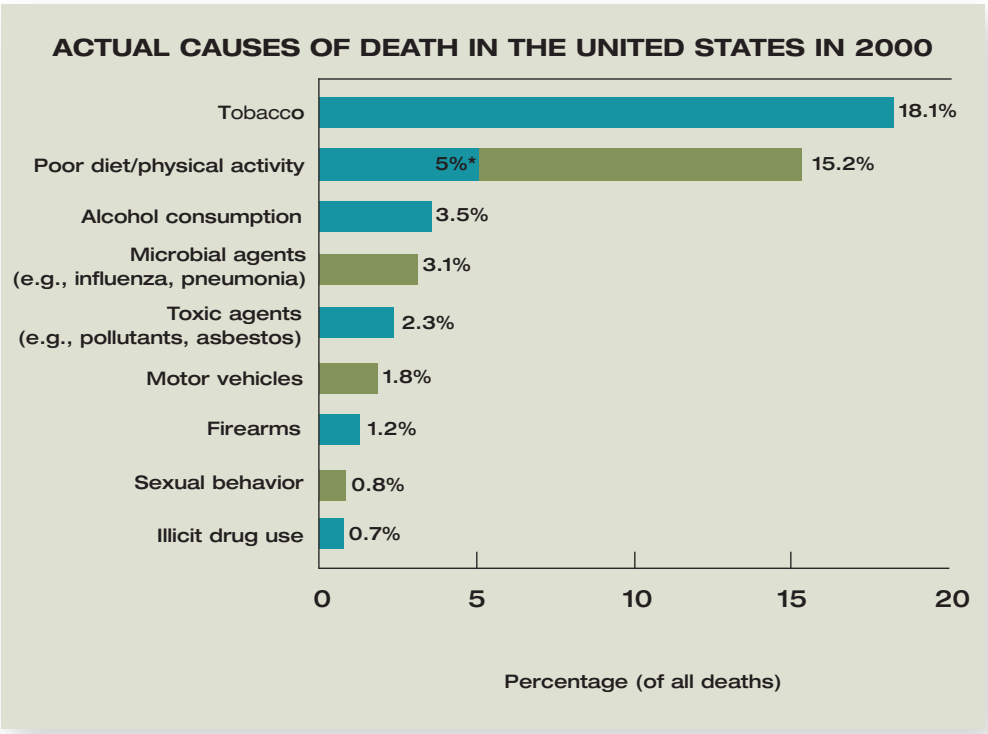
- Increase the quality and years of healthy life.
- Eliminate health disparities.[1]

The document contains 467 objectives organized into 28 focus areas. In addition, 10 leading health indicators have been identified—including physical activity, tobacco use, and overweight and obesity—to help motivate national action for major public health concerns.

Since the publication of *Healthy Workforce 2010* in 2001, there has been a dramatic shift in the mindset of employers regarding employee health care and its impact on their respective bottom lines. The new consensus is that current and future spending in employee health is not only unsustainable, but also poses a significant threat to the overall competitiveness of American businesses within the global marketplace.

Recently, employers have implemented a number of approaches not only to manage the supply of health care resources, but also the demand, namely through greater cost-shifting to the employee. However, leading organizations have realized that managing health benefit costs is a matter of dwindling returns unless they learn to *manage health behaviors* concurrently. One popular strategy is to focus employee health efforts on primary prevention and risk avoidance, thus keeping the majority of the workforce (and its dependents) low risk and healthy. Why?

First, as illustrated in the graph below, a significant percentage of deaths in the United States are associated primarily with modifiable, lifestyle-related behaviors.[2,3] Remarkably, more than one-third of total mortality is attributed to just three general factors: tobacco use, poor diet/low physical activity (and their influence on obesity), and excessive alcohol consumption.



Sources: Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual Causes of death in the United States, 2000. *Journal of the American Medical Association*. 2004;291(10):1238–1245. (see also Correction: Actual causes of death in the United States, 2000. *Journal of the American Medical Association.* 2005;293(3):293–294.)[2]

*Flegal KM, Graubard BI, Williamson DF, Gail MH. Excess deaths associated with underweight, overweight, and obesity. *Journal of the American Medical Association*. 2005;293(15):1861–1867.[3]

Why Should Employers Be Concerned With These Figures?

Beyond quality of life, tobacco use and obesity have an annual total financial impact of $157 billion and $117 billion, respectively, and are major risk factors for such chronic health conditions as cardiovascular disease, chronic obstructive pulmonary disease (COPD), cancer, and diabetes.[4,5]

Further, research is showing that it's more cost-effective to invest in preventive health practices, such as screenings, immunizations, health risk appraisals, behavioral coaching, and health awareness/education, rather than spending resources exclusively on the small minority of employees/dependents who are responsible for high-cost health claims.[6–8] This is not to say that employers should neglect high-cost employees. To the contrary, best-practice research is demonstrating the total value of an integrated, population-based strategy that addresses the health needs of all employees, dependents, and retirees across the health care continuum.

Regrettably, as reflected in the findings of the *2004 National Worksite Health Promotion Survey,* the majority of employers do not embrace this strategy—only 6.9 percent of surveyed organizations met the criteria for a comprehensive health promotion program.[9] (Refer to page 62.) This is far short of the 75 percent target included in the *Healthy People 2010* goal,[1] which shows that there are still significant barriers to the large scale adoption of worksite health promotion practices by organizations, both large and small.

However, since the 2004 report, there appears to be more momentum toward comprehensive worksite health promotion through pending federal legislation; the growth of employer health coalitions such as the National Business Group on Health, Institute for Health and Productivity Management, Center for Value-Based Health Innovations, and the National Business Coalition on Health; and peer-to-peer executive advocacy through the *Leading by Example* initiative of Partnership for Prevention.[10–14]

Finally, organizations need to view employee health as a productivity strategy rather than as an exercise in health care cost management. Over the past decade, the emerging discipline of Health and Productivity Management (HPM) has shown that health and productivity are "inextricably linked[15]"and that a healthy workforce leads to a healthy bottom line.[5] As you will learn in Section 2, there is strong evidence that health status, as measured by modifiable health risks (e.g., obesity, tobacco use) and/or health conditions (e.g., diabetes, depression, migraine), can impair day-to-day work performance (e.g., presenteeism) and have a negative affect on job output and quality.[16,17]

A New Perspective for a Healthy Workforce

Considering the impact that health status has on organizational performance, employee wellness is a critical factor to an organization's short- and long-term success. Consequently, it's time for employers, both large and small, to gain a new perspective on what employee health means from both a personal and organizational perspective. This newly revised report, *Healthy Workforce 2010 and Beyond,* provides new information and resources to assist decision makers in making planning decisions. We encourage you to use this information to benchmark your existing initiatives, identify best practices to improve or design employee health initiatives, and to comply with the two major worksite health objectives included in *Healthy People 2010*[1]:

1. Most employers (75 percent), regardless of size, will offer a comprehensive employee health promotion program.
2. Most employees (75 percent) will participate in employer-sponsored health promotion activities.

We challenge your organization to embrace these objectives and the other concepts presented in this report.

Section 1

Situational Analysis: The State of Health of Working America

Health Promotion: The process of enabling people to increase control over, and to improve their health.[18]

By every measure, growing employer health care costs are unsustainable and are viewed as a "clear and present danger" to the short-term and long-term competitiveness and survivability of American businesses. In fact, according to the *2004 National Worksite Health Promotion Survey,* 47 percent of surveyed businesses reported health care cost increases greater than 10 percent in recent years, while 18.7 percent reported increases greater than 20 percent.[9] The question, then, is not *are* costs are growing; but what can be done to slow them down.

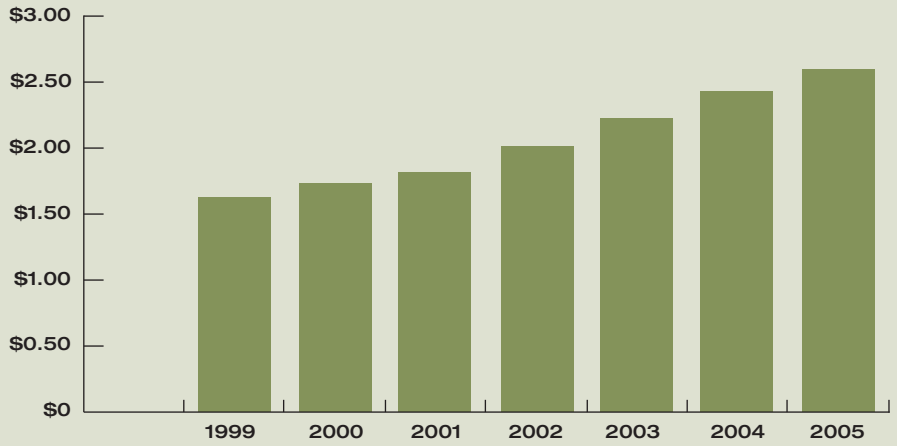
Health care costs are growing for several reasons, some of which are manageable and some of which are not. Despite these reasons, however, there are many ways for employers to mitigate rising health care costs. Through the integration of health management practices such as value-based health benefit design, health and safety policies, organizational supports and incentives, and population-specific programs that promote primary prevention and risk avoidance, organizations can be proactive in addressing both the health and productivity needs of their respective workforces.

This section will review the current state of health care in working America with a focus on key observations that are attributable to escalating employer health care costs, health-related productivity loss, and potential barriers to managing them.

Observation #1: Employer health costs are unsustainable.

- Employer-sponsored health benefits cover over 156 million Americans, or more than 3 out of 5 of the nonelderly.[19]
- Private health insurance premiums grew 5.0 percent from 1997 to 2000. That growth rate nearly doubled—to 9.2 percent—from 2000 to 2005.[20]
- Annual health care spending increased from $75 billion in 1970 to $2 trillion in 2005; by 2015, annual spending is estimated to reach $4 trillion.[21]
- Over the past 35 years, health care's share of the economy has more than doubled, rising from 7.2 percent of the Gross Domestic Product (GDP) in 1970 to 16.0 percent of the GDP in 2008, and is projected to be 20 percent of the GDP in 2015. Per capita, health care spending increased from $356 in 1970 to $6,697 in 2005, and is projected to rise to $12,320 in 2015.[21]
- From 1999 to 2005, the average employer cost for health insurance rose from $1.60 to $2.59 per employee per hour.[22]

MEAN HEALTH INSURANCE COSTS PER WORKER HOUR FOR EMPLOYEES WITH ACCESS TO COVERAGE FROM 1999 TO 2005



Source: Henry J. Kaiser Family Foundation. Employer Health Insurance Costs and Worker Compensation. http://www.kff.org/insurance/snapshot/chcm030808oth.cfm. Accessed February 13, 2009.[22]

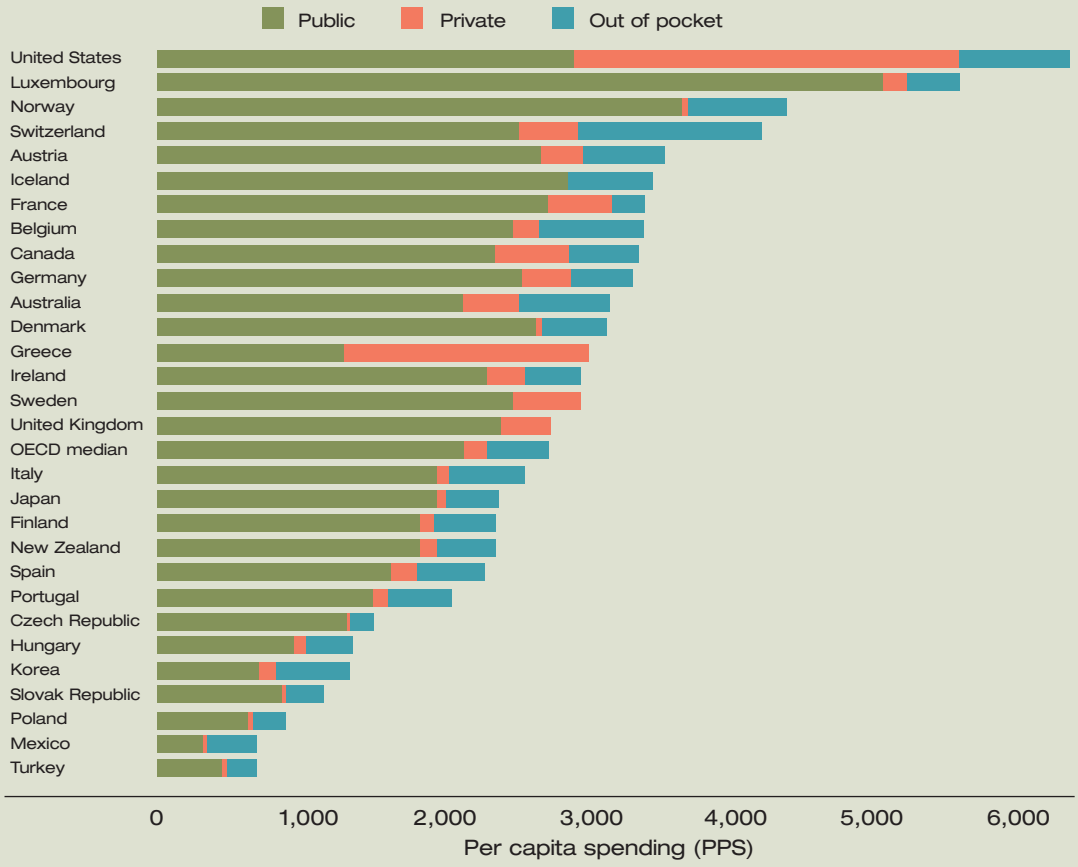
Observation #2: An aging workforce and the associated increase in chronic health conditions is driving higher health care utilization.

- The median age of the American workforce was estimated to be 40.7 in 2008, compared to 38.7 in 1998 and 34.8 in 1978.[23]
- By 2016, the number of workers aged 25 to 54 will have risen 2.4 percent from 2006 levels, but the number of workers aged 55 and older will rise by 46.7 percent and will represent more than 22 percent of the labor force.[24]
- In 2006, 70 percent of people aged 50 to 64 were actively engaged in the workforce, up nearly 4 percentage points from a decade earlier. In the 65 to 74 age bracket, 22.8 percent were employed in 2006, representing a nearly 6 percent increase over the preceding 10 years. These trends indicate a shift to older Americans staying engaged in the workforce for a longer period of time.[25]
- It is estimated that health care costs will increase 18 percent over the next 50 years due to the aging of the U.S. population. These cost increases will primarily cover the rising need for management of chronic diseases, including coronary heart disease and congestive heart failure.[26]
- About 37 percent of deaths in 2000 were attributable to tobacco, physical inactivity/poor diet, and alcohol. These behaviors often underlie the development of the nation's leading chronic diseases: heart disease, cancer, COPD, stroke, and diabetes.[27]

Observation #3: Although the U.S. spends the most per capita on health care, by many measures health outcomes are worse than in other developed countries.

- The U.S. spent $6,401 per capita on health care in 2005, more than double the median per capita expenditure of the thirty countries that form the Organization for Economic Cooperation and Development (OECD).[28]
- There are substantial geographic differences in health care spending within the United States, and money spent in high-spending regions does not translate to higher life expectancy or measured advantages in other health statistics.[29]
- When compared to other industrialized countries, the U.S. has the highest per capita costs for health care, yet ranks in the bottom quartile for life expectancy and infant mortality.[30]
- When compared to other industrialized countries, chronically ill adults in the U.S. were by far the most likely to report that cost issues compromised access to appropriate care. More than half (54 percent) reported at least one cost-related access problem, including not filling a prescription or skipping doses, not visiting a doctor when sick, or not getting recommended care.[30]

PUBLIC, PRIVATE, AND OUT-OF-POCKET PER CAPITA SPENDING IN THIRTY ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD) COUNTRIES, 2005



Notes: Data for Australia, Hungary, and Japan are from 2004. PPP is purchasing power parity.

Source: Anderson GF, Frogner BK. Health spending the OECD countries: obtaining value per dollar. *Health Affairs*. 2008;27(6):1718–1728.[28]

Observation #4: Employers are decreasing or eliminating employee health benefits and shifting more costs onto their employees.

- In 2007, 60 percent of employers offered health benefits, similar to the 61 percent reported in 2006, but lower than the 69 percent reported in 2000. This decrease was driven by the declining percentage of small firms (3–199 workers) offering health coverage.[31]
- Among companies that offer health benefits, many are likely to increase the amount workers contribute to premiums (45 percent), increase deductible amounts (37 percent), increase office visit copays (42 percent), or increase prescription drug premiums (41 percent).[31]

Observation #5: Increased employee contributions to health care can lead to poor compliance and adherence to preventive and other clinical services.

- Cost-shifting strategies through high copayments or coinsurance may create barriers to high participation in preventive health screenings or lower medication adherence in the management of common chronic health conditions such as asthma, diabetes, and hypertension.[32]
- High deductible health plans may deter employees/families from complying with preventive health screenings and/or delay treatment decisions.[32]
- Companies that concentrate their cost-reduction efforts on raising employee expenditures could ultimately spend 3 to 10 times more in lost productivity and absenteeism.[33]
- Restrictive participation policies (e.g., off-the-clock scheduling) for onsite health promotion activities such as health screenings, health risk appraisals, and workshops may act as a barrier to participation and therefore have a negative impact on health outcomes and effectiveness.

Observation #6: Indirect productivity-related costs are significant.

- In one study, job impairment (e.g., presenteeism) represented 18 percent to 60 percent of the total health-related costs for prevalent health conditions including diabetes, heart disease, and hypertension.[16]
- Poor employee health status is attributed to a 5 percent to 10 percent decrease in overall productivity. Companies not only incur additional costs associated with medical expenditures and disability leave, but also experience significant decreases in output of their goods and services.[34]
- Productivity losses related to personal and family health problems cost U.S. employers, on average, $225.8 billion annually, or $1,685 per employee per year.[35]

Focus on Health, Not Just Illness

In summary, the United States spends more on health care than many other industrialized countries, yet it ranks near the bottom in most measures of health quality. Several factors influence these higher health care costs, including an aging workforce and its associated increase in chronic health conditions. Research has shown that spending more money to treat these existing illnesses isn't the long-term answer, and that making strategic investments in health promotion and disease prevention is.

As you will see in Section 2, there is strong evidence to support investing in health management programs across the entire health care continuum, beginning with programs that promote and engage employees in primary prevention and management of risk factors. In doing so, organizations can significantly reduce risks (and associated costs) across their population, reduce the trend of health care spending, and have a more productive, engaged workforce.

Section 2

Making the Business Case: Why Invest in Employee Health?

As described in Section 1, there are a number of factors that contribute to escalating employee health- and productivity-related costs. However, one undeniable fact remains: no matter how well decision makers attempt to manage the supply chain for medical services and/or shift a greater cost burden to their employees, their attempts will have a limited effect. There needs to be a concurrent reduction in the demand for health services through integrated prevention, risk reduction, and disease management practices. Today, a growing number of organizations understand that investing in a comprehensive health management strategy not only is the right thing to do for protecting and enhancing their human capital, but also makes good business sense. This section discusses the business case for worksite health promotion as a cost management strategy as well as a productivity strategy.

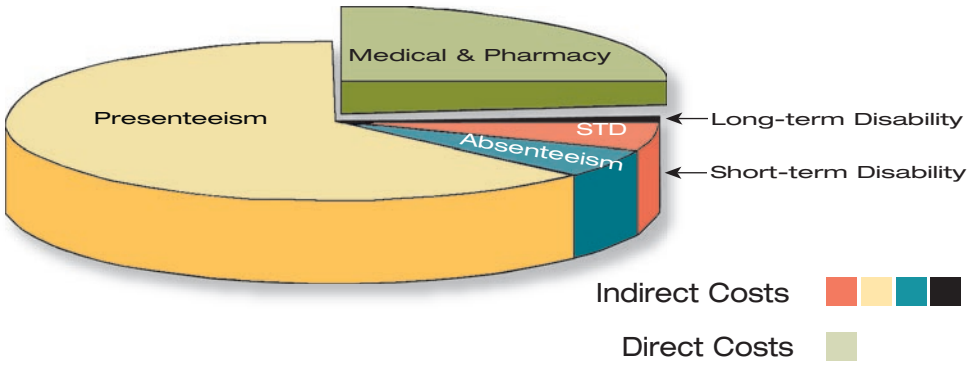
Address the Total Cost Burden of Employee Health

It is common for decision makers to focus on direct medical costs as this cost impact is evident to their respective bottom lines. However, often ignored are the so-called indirect health-related costs such as sick days, workers' compensation, short- and long-term disability, and presenteeism—or the "measurement of on-the-job work impairment.[36]"

As illustrated in the chart below, when indirect costs are factored into the total cost equation, the cost impact of productivity-related factors contribute up to three-fourths of the total cost burden. As such, productivity loss attributed to poor health status and/or lifestyle-related risk factors becomes an important consideration when making the business case for employee health management services, including health promotion.

IS YOUR ORGANIZATION AWARE OF THE TOTAL COST BURDEN OF POOR EMPLOYEE HEALTH?

Relative Contribution of Direct and Indirect Costs Within a Large Financial Services Corporation



Source: Edington DW, Burton WN. Health and productivity. In: McCunney, RJ: *A Practical Approach to Occupational and Environmental Medicine.* Philadelphia: Lippincott Williams & Wilkins. Third edition. 2003:140-152.[36]

Modifiable Health Risks Are Costly Too

In more than three decades of research, the University of Michigan Health Management Research Center (HMRC) has demonstrated the association between health risks and excess health- and productivity-related costs. As the chart below illustrates, increased health risks equate to higher health care costs, whereas lower risks equate to lower overall costs—simply put: *costs follow risks*.[37]

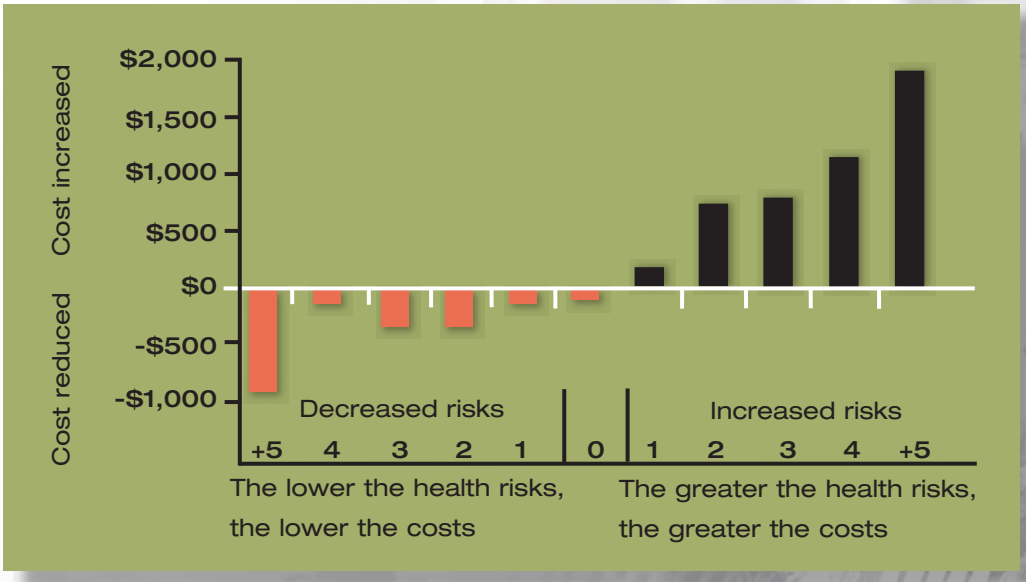
In addition, the HMRC has demonstrated the same associations between health-related risks and productivity-related costs attributed to disability, workers' compensation, and presenteeism.

Finally, the HMRC has shown that excess health risks (e.g., three or more health risks such as inactivity, excess body weight, and tobacco use) are independent of the cost burden of chronic disease. Specifically, excess health risks add to the total cost burden of chronic health conditions such as COPD, diabetes, and heart disease.[6]

It is important for organizations to address not only high-cost groups (e.g., heart disease, asthma, diabetes) through interventions such as disease management programs, but also address "at risk" groups who exhibit modifiable risk factors (e.g., obesity, low physical activity, poor diet, tobacco use) that are associated with future chronic health conditions and further exacerbate their management once diagnosed.

HEALTH COSTS FOLLOW CHANGES IN HEALTH RISKS

An integrated health management strategy needs to address all levels of risk without ignoring the majority of your employees—those at low risk. This approach reduces total cost trends, including direct and indirect expenditures.



Adapted from: Musich S, McDonald T, Hirschland D, Edington DW. Examination of risk status transitions among active employees in a comprehensive worksite health promotion program. *Journal of Occupational and Environmental Medicine.* 2003;45(4):393–399.[37]

IS OBESITY WEIGHING DOWN YOUR BOTTOM LINE?

The ever-strengthening link between a high Body Mass Index (BMI) and elevated health care costs provides substantial rationale for making weight control efforts an important part of worksite- and community-based health promotion programs.[16,17,38] Consider the following:

- Obese employees spend 77 percent more on medications than non-obese employees, and 72 percent of those medical claims are for conditions that are preventable.[39]
- A 2008 study found that moderately (BMI ≥30) to extremely obese employees (BMI ≥40) experienced a 4.2 percent loss in productivity due to weight-related health problems—which equated to $506 dollars in lost productivity per worker per year.[38]
- Studies related to overweight/obesity, physical inactivity, and tobacco use have shown that employees with these risks cost employers billions of dollars in excess health care costs.[5,17,40]
- A collaborative study involving Chrysler Corporation and the United Auto Workers Union showed that workers with unhealthy weights (BMI >30) had 143 percent higher hospital inpatient utilization than those with healthy weights (BMI <25).[41]

It's in an organization's best interest to be aggressive in managing the health risks of their entire population—regardless of health status.

This involves a risk reduction focus as well as a strategic investment in risk avoidance—keeping the majority of the population low-risk and healthy.

Reduce the Risk Migration of Your Population, Build Your Base, Lower Your Costs

As illustrated on page 11, by redistributing the relative percentage of individuals at moderate and high risk to a lower-risk status, your organization becomes healthier—and greater cost savings are realized—by increasing your low-risk base. At a minimum, Dee Edington, PhD, Director of the HMRC, advises that companies encourage their employees: "Don't get worse."[42] This approach slows the migration of individuals to a higher-risk level and reduces associated costs.[36]

To do so, two critical steps are recommended:

1. Use a health risk appraisal system to establish baseline benchmarks for defining the risk distribution of your population.
2. Observe the degree of migration (churn) among your risk groups. Based on this process, you can address the following questions:
   - –What is the risk profile (distribution) of our population? For example, what percentage of our population is considered low risk (e.g., 0–2 risk factors)?
   - –What are the most prevalent health-related risks (e.g., obesity, low physical activity, high cholesterol) within our population?
   - –What are the relative costs (e.g., medical, pharmacy, sick days, disability) related to each risk level?

Once these questions are answered, an organization can develop a clearer understanding of its "risk profile" and is able to develop goals, objectives, and investment recommendations that align with this profile.

Think and Act on Your Entire Population

While it's certainly in a company's best interest to help its unhealthy population become healthy, it's even more important to keep its healthy population from becoming sick. As such, employers are encouraged to implement population-based programs (e.g., health risk appraisal, health screenings, lifestyle management) in conjunction with targeted interventions that focus on high-cost areas such as obesity, tobacco, and chronic health conditions such as heart disease and diabetes.

A second advantage to population management is the increase in what Edington calls a company's "market share," or its percentage of healthy employees.[6] Like advertising or product consumption, the higher a company's share of healthy, productive employees, the greater the chances of that company's success and profitability. According to Edington, the percentage of a company's healthy employees should be no less than 60 percent and ideally between 75 percent and 85 percent.[6]

Using this percentage as a benchmark, and striving not to lose market share, companies can begin to leverage their share of healthy employees to address their financial risks related to poor health status within the rest of their population. Research has shown that nearly half of employees who transition to lower health risk categories do so within the first year of a health promotion program.[6]

DISTRIBUTION AND MIGRATION OF EMPLOYEES ACCORDING TO NUMBER OF HEALTH RISKS

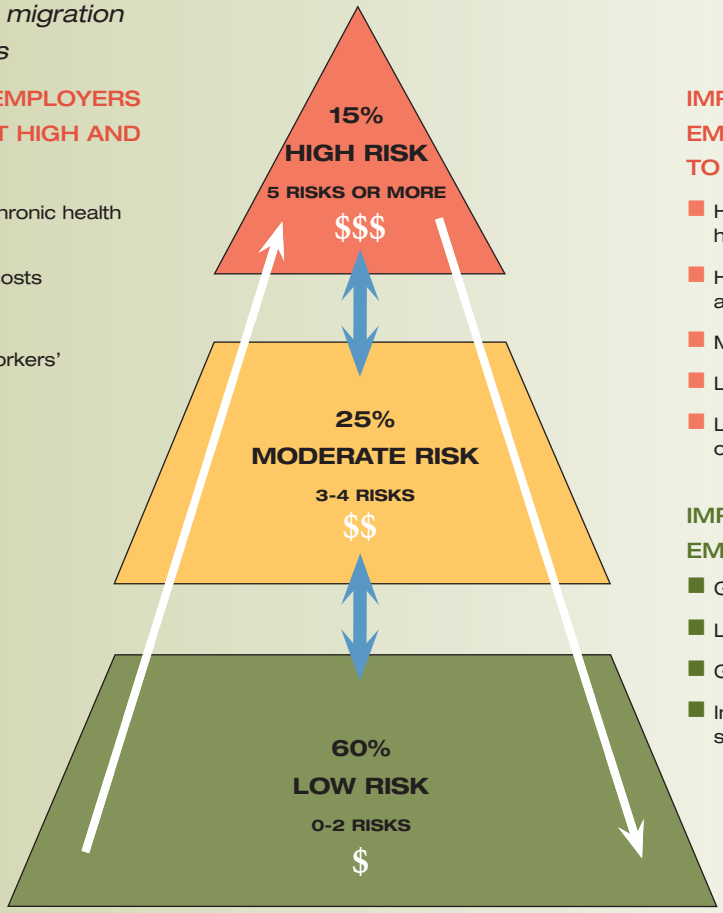
Arrows indicate risk migration between risk groups

IMPLICATIONS FOR EMPLOYERS WITH EMPLOYEES AT HIGH AND MODERATE RISK

- Higher prevalence of chronic health conditions
- Higher direct medical costs
- More absenteeism
- Higher disability and workers' compensation costs
- Lower productivity due to higher presenteeism

IMPLICATIONS FOR EMPLOYERS WITH EMPLOYEES AT LOW RISK

- Healthier, productive workforce
- Lower direct and indirect health-related costs



IMPLICATIONS FOR EMPLOYEES AT HIGH TO MODERATE RISK

- Higher probability of chronic health condition(s)
- Higher out-of-pocket medical and pharmaceutical costs
- More pain and suffering
- Lower quality of life
- Lower personal effectiveness on and off the job

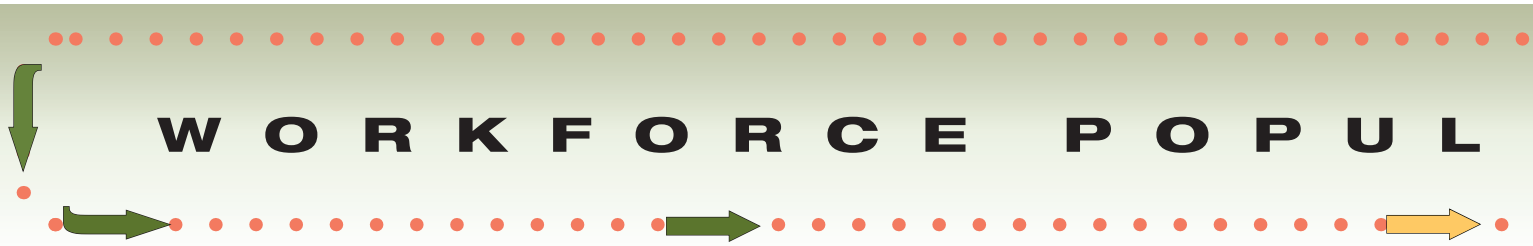
IMPLICATIONS FOR EMPLOYEES AT LOW RISK

- Greater independence/health
- Lower medical costs
- Greater energy and vitality
- Increased life and job satisfaction

Adapted from: Musich S, McDonald T, Hirschland D, Edington DW. Examination of risk status transitions among active employees in a comprehensive worksite health promotion program. *Journal of Occupational and Environmental Medicine*. 2003;45(4):393–399.[37]

Investing in the Health of Your Entire Population

Healthy Workforce 2010 objectives include 10-year targets to improve the health of the nation. Worksite health promotion objectives include the control of weight, tobacco use, and cholesterol. It is important for employers to offer appropriate programs across the continuum of health, from low to high risk. The ***majority*** of the population is ***low risk*** and generally healthy.[6] Other groups are medium- to high-risk because of such factors as family history, biometric measures (e.g., obesity, blood pressure, cholesterol) and high-risk behaviors (e.g., poor eating habits, tobacco use, low levels



LOW RISK/HEALTHY

Depending on the needs of a given population, **maintaining employees at low risk** may be at least as cost-effective as addressing high-risk employees. The potential savings from average risk reduction is $153 per person per year, compared to a savings of $350 for keeping low-risk employees at low risk.[6]

Common Program Elements

- Employee health insurance with comprehensive coverage for evidence-based preventive services
- General health education/communications related to primary prevention and risk avoidance
- Periodic preventive screenings
- Health Risk Appraisal (HRA) with interpretative session by a health coach
- Immunizations (e.g., flu, hepatitis, HPV)
- Supportive work environment that encourages healthful eating choices (e.g., vending/cafeterias), regular physical activity (e.g., walking paths, company fitness centers), and stress management (e.g., quiet rooms)
- Tobacco-free workplace
- Occupational health and safety
- Incentive programs for encouraging primary prevention (e.g., 10,000 steps programs, benefit credits for participating in an HRA)
- Health fairs

AT RISK

Risk is not static. Without preventive programs to help low-risk individuals maintain their low-risk status, 2 percent to 4 percent of an employee population is likely to migrate from low-risk status to a higher-risk status within one year.[6]

Common Program Elements

- General health education/communications on risk reduction through print, podcasts, and Web-based applications
- Health screenings (e.g., blood pressure, cholesterol, blood glucose)
- Disease-specific risk assessments (e.g., Cardiovascular Disease [CVD], diabetes, depression, migraine)
- Targeted communications based on need (e.g., weight management, physical activity, smoking cessation, blood pressure)
- Health coaching (e.g., face-to-face, telephonic, and/or online)

of physical activity). ***High-risk*** individuals are more likely to have chronic disease (e.g., diabetes, heart disease, COPD) and generate ***higher*** total costs than low-risk individuals.[6]

Below are common population health management strategies for keeping healthy employees healthy and low risk; modifying/reducing health risk factors; improving medical consumerism skills; and managing health conditions more effectively, especially those that are chronic in nature such as asthma, depression, diabetes, heart disease, and COPD.

A T I O N M A N A G E M E N T

HEALTH PROBLEM	TREATMENT OPTIONS	OUTCOME AND EVALUATION
Most health programs are in place to address health problems that require action when an individual ignores a problem, seeks self-care, uses the emergency room, makes an appointment with a doctor, or is hospitalized.	Many chronic diseases (e.g., cardiovascular disease, diabetes) are associated with behavioral risk factors such as obesity and tobacco use. An estimated 85 percent of **disease management involves self-management practices.**[45]	Assessing the effectiveness (value) of specific interventions is usually based on process and cost measures instead of quality of life, morbidities, and mortality. Most experts agree that there needs to be more **focus on these outcomes.**
Common Program Elements	***Common Program Elements***	***Common Program Elements***
■ Health benefit education	■ General communications on medical decision making	■ Measurement of process outcomes such as preventive screenings, medical follow-up
■ Medical self-care education through print and online resources	■ Disease management programs for chronic health conditions (e.g., asthma, diabetes)	■ Clinical measures (e.g., A1c for diabetes, cholesterol panel)
■ Telephonic nurse hotline through health plan or third-party vendor	■ Lifestyle management	■ Patient satisfaction
■ Communications and workshops on patient/physician communication	■ Communications and resources for appropriate adherence to treatment guidelines	■ Quality of life measures
■ Communications and workshops on medical decision making	■ Incentives for successful adherence to treatment guidelines	■ Direct medical health care costs (e.g., inpatient, outpatient, pharmacy)
■ CPR and first aid training	■ Awareness of community resources that are disease specific (*e.g., American Cancer Society, American Diabetes Association, American Heart Association, American Lung Association*)	■ Indirect health costs (e.g., sickdays, disability, workers' compensation, presenteeism)
		■ Morbidity/mortality data

Adapted from: Pfeiffer GJ. Stages of the continuum of care. *Worksite Health.* 2000;7(2):23–26.[43]

OBESITY, RISK MIGRATION, AND PRODUCTIVITY

One key advantage to managing the medical costs of an entire population is the potential recognition and avoidance of risk migration (e,g, low risk to medium risk). A recent study described the relationship between BMI and job impairment (presenteeism) as being characterized by a "threshold effect." The study found that once employees crossed the BMI threshold of 35, presenteeism increased significantly. The authors recommend[17]:

- Reducing medical costs by preventing overweight and mildly obese employees from "migrating" into higher weight ranges.
- Applying this threshold model to a number of other health condition relationships such as physical inactivity, poor nutrition, high cholesterol, blood pressure, tobacco use, and cancer.

The Bottom Line? Worksite Health Promotion Is a Sound Business Strategy

Today, there is sound evidence that investing in worksite health promotion programs provides organizations with a number of financial incentives that not only address escalating health care costs, but also provide a productivity management strategy. Consider the following:

- The University of Michigan Health Management Research Center (HMRC) estimates that an organization saves $350 annually when a low-risk employee remains low risk, compared to a savings of $153 when a high-risk employee's health risks are reduced.[6]
- Findings from 56 studies of worksite health promotion programs showed an average[44]:
  - –27 percent reduction in sick leave absenteeism.
  - –26 percent reduction in health care costs.
  - –32 percent reduction in workers' compensation and disability management cost claims.
  - –$5.81-to-$1 ROI ratio.
- In one meta-review, 18 of 18 studies found that absenteeism dropped after the introduction of a health promotion program. In 6 studies that reported cost benefit ratios, average savings totaled $5.07 for every dollar invested. In addition, 28 of 32 intervention studies found that medical care costs dropped after the introduction of a health promotion program and the 10 studies that reported cost benefit ratios averaged savings of $3.93 for every dollar invested.[45]
- Other studies have concluded that businesses can gain $3 to $6 for every dollar spent on health promotion. Many researchers believe the indirect, productivity-related savings are double the more easily measured direct medical care costs.[46]

As can be seen, investing in a comprehensive employee health promotion program provides organizations with many benefits in managing employee health and productivity.

Section 3

Healthy People 2010 Essentials for Business

Healthy People 2010 is, in essence, a blueprint for a 10-year national initiative to improve the health of all Americans. Its two overarching goals are to increase the life expectancy and quality of life for Americans of all ages and to eliminate health disparities among different segments of the population. It lists the most significant threats to health in the United States today—including risky behaviors, environmental factors, and inadequate access to health care—and establishes goals to reduce those threats.

Healthy People 2010 was developed through an exhaustive process involving many stakeholders, including businesses. It is based on the best scientific knowledge available and is organized as a set of quantitative health objectives. *Healthy People 2010* serves as a scorecard to gauge our collective success toward improving health.

States and communities are using *Healthy People 2010* objectives as the basis of local health promotion plans. Congress has stipulated that *Healthy People 2010* objectives must be used to assess the impact of several federal health programs. Of greater relevance to business, *Healthy People 2010* objectives also are being used to measure the performance of health plans and health care organizations. For example, the National Committee on Quality Assurance (NCQA) has incorporated many *Healthy People 2010* targets into its Health Plan Employer Data and Information Set (HEDIS), a compilation of standardized measures to help health care purchasers assess the performance of managed care organizations.[47]

Employers can use *Healthy People 2010* objectives as well, in this case to focus business-sponsored health promotion/disease prevention efforts and measure worksite and community-wide outcomes against national benchmarks.

Dozens of objectives in *Healthy People 2010* call on employers specifically to help the nation meet its goal as discussed in this report.

PROMISING PRACTICES FOR HEALTH AND PRODUCTIVITY MANAGEMENT (HPM)

Over the past decade, there has been a greater emphasis among health promotion practitioners to identify best practices for delivering high quality services and programs. Ron Goetzel, PhD, and associates have studied organizations that have implemented successful Health and Productivity Management (HPM) programs. The research team identified the following promising practices within leading organizations[48]:

- Features and incentives that are consistent with the organization's core mission, goals, operations, and administrative structures.
- Simultaneous operation at multiple levels, addressing individual, environmental, policy, and cultural factors in the organization.
- Targeting the most important health care issues among the employee population.
- Engaging and tailoring diverse components to the unique needs and concerns of individuals.
- Achieving high rates of engagement and participation, both in the short and long term.
- Achieving successful health outcomes, cost savings, and additional organizational objectives.
- Evaluation based on clear definitions of success, as reflected in scorecards and metrics agreed upon by all relevant constituencies.

Healthy People Objectives at a Glance

Making Sense of the *467 Healthy People 2010* Objectives

The 467 objectives contained in the two-volume *Healthy People 2010* report can be overwhelming. Fortunately, you don't have to worry. This section:

- Highlights the two *Healthy People 2010* objectives that focus specifically on the worksite.
- Discusses healthy workforce objectives relevant to employers and strategies to achieve them.
- Identifies about 50 additional objectives that could be adopted as part of a worksite health promotion program.

Major Worksite Objectives

Healthy People 2010 includes two major worksite-specific objectives[1]:

1. **At least three quarters of U.S. employers, regardless of size, will offer a comprehensive employee health promotion program that includes the first five elements listed below.**
2. **At least three-quarters of U.S. employees will be participating in employer-sponsored health promotion activities.**

Healthy Workforce Objectives

Partnership for Prevention thoroughly reviewed the 467 *Healthy People 2010* objectives to identify a small, manageable set of health objectives relevant to employers. This exhaustive review led to the identification of the Healthy Workforce Objectives. These eight objectives are diverse: some aim to improve individual behaviors, while others focus on physical or social environmental factors or important health system issues. The conditions addressed in these objectives are relevant to employers because they are responsible for a large burden of illness and injury among U.S. working-age adults, they are associated with business costs, and employers can do something about them. Effective interventions are available and can be offered at the worksite or otherwise be supported by employers. Some are even low cost.

The *2004 National Worksite Health Promotion Survey* found that 68.1 percent of large worksites (with 750+ workers) provide tobacco cessation services for employees at the worksite. Despite the proven success of medical interventions for tobacco use, only 8.8 percent of businesses with 50 to 99 employees (the smallest size surveyed) offered such services. Overall, only 18.6 percent of worksites surveyed offered smoking cessation assistance.[9]

U.S. workers face other barriers to cessation services as well. First, although the nicotine patches, gums, and lozenges are available without a prescription, the cost (up to $12.00 per day,[49] more than twice the average cost of a pack of cigarettes[50]) can be discouraging for many tobacco users. Second, because 18 percent of people under the age 65 lack health insurance altogether,[51] they may not be able to access behavioral counseling and medications that could help them quit.[52]

As discussed in Section 2, employees with behavioral risk factors, particularly multiple risks, are more likely to use medical services, be absent from work, and have lower productivity than their healthier colleagues. Employers primarily bear the cost of these outcomes. But employees pay a high price too, measured in out-of-pocket medical expenses, possibly reduced earnings, decreased quality of life, and a shortened lifespan.

Effective employer-sponsored activities, however, will help employees make behavioral changes that will help prevent many acute and chronic ailments. In fact, four of the eight *Healthy Workforce Objectives* for employers target behavioral health risks such as tobacco use, alcohol/drug use, physical inactivity, and overweight/obesity. Once enacted, a supportive social and physical environment will help employees adopt and sustain these healthy behaviors.

Health Risk Behaviors

Four objectives for employers focus on health risk behaviors:

HEALTHY WORKFORCE OBJECTIVE #1: REDUCE TOBACCO USE BY ADULTS

In 2006, 25 percent of people aged 12 and older smoked cigarettes compared to the *Healthy People 2010* goal of 12 percent.[53]

While all these individuals aren't of working age, the highest user demographic—40.2 percent of 21 to 25 year olds—can and do work. Unfortunately, data show that 35.6 percent of 18 to 20 year olds also smoke, meaning that tomorrow's workforce is likely to continue to suffer from tobacco-related diseases.[53] In light of these numbers, and the rising costs of resulting medical care, concrete implementation of smoking cessation programs at the worksite becomes all the more important.[54]

For employers, the health and other repercussions of tobacco use can be significant when compared to nonsmoking employees including:

- Higher health and life insurance premiums and claims
- Greater absenteeism
- Increased risk of accidents and fires (plus related insurance costs)
- Increased maintenance costs due to tobacco litter and tobacco smoke pollution (which dirties ventilation systems, computer equipment, furniture, carpets, and other office furnishings)
- Property damage from cigarette/cigar burns
- Risk of legal liability if nonsmokers are exposed to environmental tobacco smoke
- Reduced worker productivity

The good news is that most smokers report they would like to quit—81 percent, in fact, according to one poll.[53] Quitting is hard, however, since nicotine is as addictive as heroin, cocaine, or alcohol. Health experts consider nicotine addiction a chronic condition that requires ongoing treatment to prevent or shorten relapse.[54]

- **Strategies:**
  - –Prohibit tobacco use at the workplace.
  - –Offer employees and their spouses smoking cessation counseling to help them quit (e.g., quitline services).
  - –Offer an HRA to all employees and follow-up with tobacco users.
  - –Work with your health plan to ensure coverage for all tobacco treatment services recommended by the U.S. Public Health Service (USPHS)—including primary care visits or counseling for cessation advice and all pharmaceuticals approved by the U.S. Food and Drug Administration. (The Public Health Service "Treating Tobacco Use and Dependence" can be found at www.surgeongeneral.gov/tobacco/default.htm).

HEALTHY WORKFORCE OBJECTIVE #2: REDUCE THE COST OF LOST PRODUCTIVITY DUE TO ALCOHOL AND DRUGS

National studies of the economic costs of alcohol and drug abuse have concluded that such abuse costs the U.S. over $365 billion per year.[55,56] This sizable sum accounts for the costs of health care, motor vehicle crashes, crime, lost productivity, and other outcomes associated with substance abuse. However, a large portion of this amount is attributed solely to lost productivity.[57]

Several studies have shown that alcohol-related job performance problems—absenteeism, arriving late to work, leaving early, feeling sick at work or sleeping on the job, doing poor work, doing less work, and arguing with co-workers—are caused not only by worksite drinking, but also by heavy drinking outside of work. For example, one study using flight simulators found impairment 14 hours after pilots reached a blood alcohol concentration between 0.10 and 0.12 percent.[58] Moreover, those who drink even relatively small amounts of alcoholic beverages may contribute to alcohol-related death and injury in occupational incidents, especially if they drink before operating a vehicle.[58-60]

Just how widespread is the problem of substance abuse? In 2006, almost 9 percent of full-time workers engaged in heavy drinking—defined as five or more drinks,

GUIDELINES FOR TOBACCO CONTROL

The Centers for Disease Control and Prevention (CDC) recommend five key actions for tobacco control.[55]

1. Pay for counseling and all FDA approved medications.
2. Cover at least four counseling sessions of at least 30 minutes each, including proactive telephone counseling and individual counseling.
3. Cover both prescription and over-the-counter medications.
4. Provide counseling and medication coverage for at least two smoking cessation attempts per year.
5. Eliminate or minimize copays or deductibles for counseling and medications, as even small copayments reduce the use of proven treatments.

Comprehensive tobacco cessation benefits cost between $1.20 and $4.80 per person per year compared to $1,623 per smoker per year in excess medical expenditures alone (not including lost productivity).[55]

per day, on five or more days during the past 30 days—and 79.2 percent (12.9 million) of all heavy drinkers were employed either full- or part-time. The heaviest drinkers were relatively young, between 21 and 25 years of age.[61]

More than 20 million Americans (8.3 percent of the population aged 12 or older)—an increase of 5 million from about 10 years ago—use illicit drugs, and the majority of users are employed.[62, 63] In addition, prescribed medications (e.g., pain) are abused. As with alcohol, drug use is greatest among those entering the workforce most rapidly, men and women aged 16 to 25.[61,63] Although no occupation is immune from drug use, it is a problem especially among accommodations and food services workers (16.9 percent of whom use illicit drugs); construction workers (13.7 percent); arts, entertainment, and recreation workers (11.6 percent); and information personnel (11.3 percent).[62]

Unfortunately, the stigma attached to substance abuse often increases the severity of the problem. For example, individuals may be reluctant to acknowledge that they suffer from alcohol or drug dependence and/or may be unwilling to seek treatment, even if it is available.

■ Strategies

–Provide employees access to confidential counseling and referrals to treat substance abuse.

–Participate in community interventions/events to prevent substance abuse.

–Offer an HRA to all employees and follow-up with those at risk.

–Establish an Employee Assistance Program (EAP) and/or link EAP to health promotion initiatives.

–Provide drug and alcohol education to supervisors to counteract "enabling" behaviors.

–Provide drug and alcohol education to employees to counteract "enabling" behaviors.

–Establish worksite alcohol and drug policies.

HEALTHY WORKFORCE OBJECTIVE #3: INCREASE THE PROPORTION OF ADULTS WHO ENGAGE IN REGULAR, PREFERABLY DAILY, MODERATE PHYSICAL ACTIVITY FOR AT LEAST 30 MINUTES PER DAY

Hundreds of studies document the health benefits of physical activity. One prominent report, *Physical Activity Guidelines for Americans,* published by the U.S. Department of Health and Human Services, summarizes the following benefits for adults and older adults based on the strength of scientific evidence[64]:

■ Strong Evidence

Lower risk of:

–Early death
–Heart disease
–Stroke
–Type 2 diabetes
–High blood pressure
–Adverse blood lipid profile
–Metabolic syndrome
–Colon and breast cancers
–Weight gain when combined with diet
–Cardiorespiratory and muscular deficits
–Falls
–Depression
–Cognitive function loss (older adults)

■ Moderate to Strong Evidence

–Better functional health (older adults)
–Reduced abdominal obesity

■ Moderate Evidence

–Weight maintenance after weight loss
–Lower risk of hip fracture
–Increased bone density
–Improved sleep quality
–Lower risk of lung and endometrial cancers

Yet, despite the benefits, only about 26 percent of U.S. adults report vigorous leisure-time activity that involves large muscle groups in dynamic movement for 20 minutes or longer 3 or more days per week.[65] And, though better than in years past,[1] still less than half of Americans report moderate physical activity on 5 or more days per week for 30 minutes or longer (*Healthy Workforce Objective #3*).[66]

The major barriers most people face when trying to increase physical activity are:

–Lack of time
–Inadequate access to convenient and affordable fitness facilities
–Lack of safe environments in which to be active

■ Strategies

–Sponsor company fitness challenges.
–Provide well lit, accessible stairwells, and place signage by elevators that encourages stair use.
–Support lunchtime walking/running clubs or company sports team.
–Create accessible walking trails and/or bike routes.
–Provide periodic incentive programs to promote physical activity.
–Offer an HRA to all employees and follow-up with sedentary employees.
–Contract with health benefit plans that offer free or reduced-cost memberships to health clubs.
–Provide facilities for workers to keep bikes secure (e.g., racks/bike barns).
–Provide showers and lockers at the worksite.
–Allow flexible work schedules so employees can exercise.
–Discount health insurance premiums and/or reduce copayments and deductibles in return for an employee's participation in specified health promotion or disease prevention program.

PHYSICAL ACTIVITY GUIDELINES

The *2008 Physical Activity Guidelines for Americans* outlines the types, time, intensity, and frequency requirements of physical activity in order to realize positive health benefits.[64] The main messages of the *Guidelines* are:

- Regular physical activity reduces risk of many adverse health outcomes.
- For all individuals, some physical activity is better than none, but more is better.
- Added health benefits generally occur as the amount of activity increases.
- Physical activity is safe for almost everyone—the health benefits of physical activity far outweigh the risks.

Physical Activity Recommendations for Most Adults[64]

- At a minimum, adults should do 2 hours and 30 minutes a week of moderate-intensity, or 1 hour and 15 minutes (75 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity. Aerobic activity should be performed in episodes of at least 10 minutes, preferably spread throughout the week.
- Muscle-strengthening activities on 2 or more days each week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).
- For additional health benefits, adults should work up to 300 minutes (5 hours) each week of moderate-intensity aerobic activity. Or, 150 minutes (2 hours and 30 minutes) each week of vigorous-intensity aerobic activity. Or, an equivalent mix of moderate- and vigorous-intensity aerobic activity. Physical activity beyond this amount may provide additional benefits.

HEALTHY WORKFORCE OBJECTIVE #4: INCREASE THE PROPORTION OF ADULTS WHO ARE AT A HEALTHY WEIGHT

Two-thirds of Americans are considered overweight or obese.[67] The effects of obesity on employers' health care costs are significant:

- Each year over $40 billion in medical costs and lost productivity are attributed to poor nutrition.[68]
- In a study of a large manufacturer, each unit increase of BMI (25 to 45) demonstrated a 4 percent increase in medical costs and a 7 percent increase in pharmaceutical costs.[69]
- Per year, the direct costs of being overweight, obese, and severely obese are estimated at $147.11, $712.34, and $1,977.43, respectively.[70]
- Obese employees tend to be absent from work due to illness substantially more than normal-weight employees.[71]
- Almost 80 percent of obese adults have diabetes, hypertension, coronary artery disease, gallbladder disease, high cholesterol levels, and/or osteoarthritis.[72]
- The annual direct medical cost of obesity is estimated to be $75 billion.[73]

Although the causes of excess weight are complex and not fully understood, experts attribute much of the increase in U.S. obesity to the simple fact that adults and children consume more calories than they use.[74–76] In other words, overeating and lack of physical activity underlie much of the epidemic. Between 1977 and 2002, Americans' average daily caloric intake greatly increased.[75–77] Moreover, according to the U.S. Department of Agriculture's *2005 Healthy Eating Index*, Americans are eating significantly fewer whole grains, fruits, and vegetables than in 1996.[77] At the same time, many U.S. adults and children are sedentary.

Yet, the news is not all bad. Research indicates that a sustained reduction in body weight of just 10 percent yields significant health and economic benefits.[76,78]

In a systematic review of worksite weight loss programs that focused on improving diet and increasing physical activity, 11 randomized, controlled studies with follow-up periods ranging from 2 to 18 months showed that intervention groups lost significantly more weight than controls, with a mean difference

ranging from -0.44 to -14 pounds. The authors recommend that further studies be conducted in worksite weight loss programs that "integrate educational, behavioral, environmental, and economic supports."[79]

This study echoes other expert recommendations that weight management/obesity control initiatives be integrated within a comprehensive worksite health promotion program. As outlined on page 14, organizations can realize a return on investment of $3 to $6 for each dollar invested over a two- to five-year period.[45]

Strategies

–Through an HRA, identify employees who are at risk (e.g., high BMI or waist girth) and refer them to appropriate interventions/resources related to weight management.

–Provide targeted weight management interventions that use a variety of service options: printed, online, and/or person-to-person (e.g., health coaching).

–Provide healthy snacks in vending machines, in break rooms, meetings, and at company events.

–Provide healthy meal choices in cafeterias, meetings, and at company events.

–Disseminate nutrition information to employees. For example, work with a food management vendor to provide information about the nutritional content of cafeteria foods.

–Subsidize healthy foods in company cafeteria(s) and/or vending machines while charging more for less healthy selections.

–Choose health plans that cover programs to help enrollees with weight management.

–Institute flexible work schedules so employees can participate in weight-loss programs.

–Sponsor not-for-profit health associations, hospitals, health care providers, and/or public health agencies to provide onsite programs on healthy eating and weight management.

–Locate dietetics professionals near your worksite as a resource for employees who want information about healthy eating/meal planning or weight control. (Use the "find a nutrition professional" service on the American Dietetic Association Web site www.eatright.org)

–Assign a fitness center "trainer" to each participant in weight management classes to help overweight employees meet health and fitness goals.

WEIGHT MANAGEMENT PROGRAM

FPL Group (Florida Power & Light)

FPL-WELL Steps to Success (STS)[80]

Objectives: To address the rising rates of obesity, FPL-WELL developed the STS Program to help employees reduce body weight, prevent further weight gain, achieve behavioral changes in food choices and physical activity and achieve improvements in blood lipids and blood sugar.

The 2009 performance objectives for the six-month STS program include:

- Decrease body mass index (BMI) by 4.5 percent of the participant base.
- Decrease total cholesterol levels below 200 mg/dL in 43 percent of participants.
- Decrease blood glucose levels below 100 mg/dL in 72 percent of participants.

Strategies: The STS program's mission is to provide an integrated, high touch experience that leads to improved health and well-being through the following strategies:

- Initial physical exam with medical provider to assess health status.
- One-on-one counseling sessions with the dietitian, fitness specialist, and behavioral coach to provide assessment and goal setting.
- Group sessions to provide social support.
- Email/phone follow-up to provide motivation and engagement.

Outcomes:

- Participants averaged a BMI decrease of 4 percent.
- 41 percent of participants lowered total cholesterol to less than 200 mg/hL.
- 69 percent of participants lowered blood glucose to less than 100 mg/dL.

ENVIRONMENTAL SUPPORTS AND WEIGHT MANAGEMENT

The Dow Chemical Company

LightenUP Program[74]

Objectives:

- Design, implement, and evaluate an environmental/ecological intervention program at 12 worksites to prevent and manage overweight and obesity.
- Study the effect of moderate and intense interventions on biometric and behavioral measures.

Strategies:

- All sites received a core set of individual-based health programming. Moderate and intense interventions implemented at 9 locations; 3 control group locations received core programming only.
- Elements applied to all moderate and/or intense sites
  1. Environmental prompts and interventions encouraging healthy eating choices and regular physical activity
  2. For intense sites: additional leadership training, goal setting, and reporting and recognition.

Selected Outcomes:

- Year 1: the intervention groups maintained, control group gained weight.
- Year 2: overall weight/BMI patterns were sustained. Final results: intervention groups maintained, control groups gained weight over time.
- High blood pressure decreased significantly within the intervention group
- With national obesity rates on the rise, and people gaining weight as they age, small but significant effects of environmental interventions are encouraging.

–Offer financial incentives for employee participation in weight management programs. For example, offer full or partial reimbursement for health insurance premiums and/or contributions to Health Savings Accounts (HSAs) or Health Reimbursement Accounts (HRAs).

–Encourage the formation of employee support groups (e.g., group meetings, online bulletin boards) that address weight management.

Physical Work Environment

Two health objectives for employers focus on the physical work environment:

HEALTHY WORKFORCE OBJECTIVE #5: REDUCE DEATHS FROM WORK-RELATED INJURIES

HEALTHY WORKFORCE OBJECTIVE #6: REDUCE WORK-RELATED INJURIES NECESSITATING MEDICAL CARE OR LOST/RESTRICTED WORK ACTIVITY

Although U.S. worksites are becoming safer, the toll of workplace injuries and illnesses is still significant. The U.S. Bureau of Labor Statistics reports that in 2007 about 5,488 individuals died from injuries sustained on the job.[81] The same year, workers reported 4 million nonfatal occupational injuries or illnesses, of which about 1.2 million required recuperation away from work or restricted duties at work.[82]

The cost to employers from occupational deaths, injuries, and illnesses includes wage and productivity losses, medical costs, administrative expenses (such as the cost of time to write up injury reports), and damage to employer property (notably from fires and automobile accidents). The National Safety Council estimates that in 2006 the total costs of work-related death or disabling injury, per incident, to be $1,240,000 and $55,000, respectively.[83]

What are the major causes of workplace deaths? Highway crashes remain the number one cause of on-the-job fatalities, followed by falls. The third most common cause—showing its first significant increase in 13 years—is homicide/assault.[84]

Prominent nonfatal occupational illnesses and injuries include sprains, fractures, noise-induced hearing loss, repetitive motion disorders (e.g., carpel tunnel syndrome), low-back problems, respiratory conditions resulting from exposure toxins or dust, elevated blood lead levels, and hepatitis B.[82]

Many employers, and especially those in high-risk industries, already offer or mandate employee education on job hazards and injury prevention. The most common health and safety policies in mid- to large-size businesses (those with 50+ employees) address substance use and occupant protection for vehicular drivers. Less than half of these firms (45 percent) offer back injury prevention programs, whereas 53 percent offered such programs in 1999.[9]

The U.S. Bureau of Labor Statistics reports that the 2007 rate of nonfatal occupational injuries and illnesses (122 per 10,000 workers) was 4 percent lower than the 2006 rate. There was also a 2 percent decrease in the number of cases requiring time away from work (down to 1.2 million cases in 2007).[82] Well-designed worksite safety programs will continue to reduce the burden of occupational health problems for both employers and employees.

Strategies

–Ensure that all employees receive appropriate and regular safety training and information.

–Conduct ergonomic evaluations and consider recommended changes to the worksite.

–Develop procedures that encourage employees to report near accidents without fear of penalty so that corrective actions can be taken.

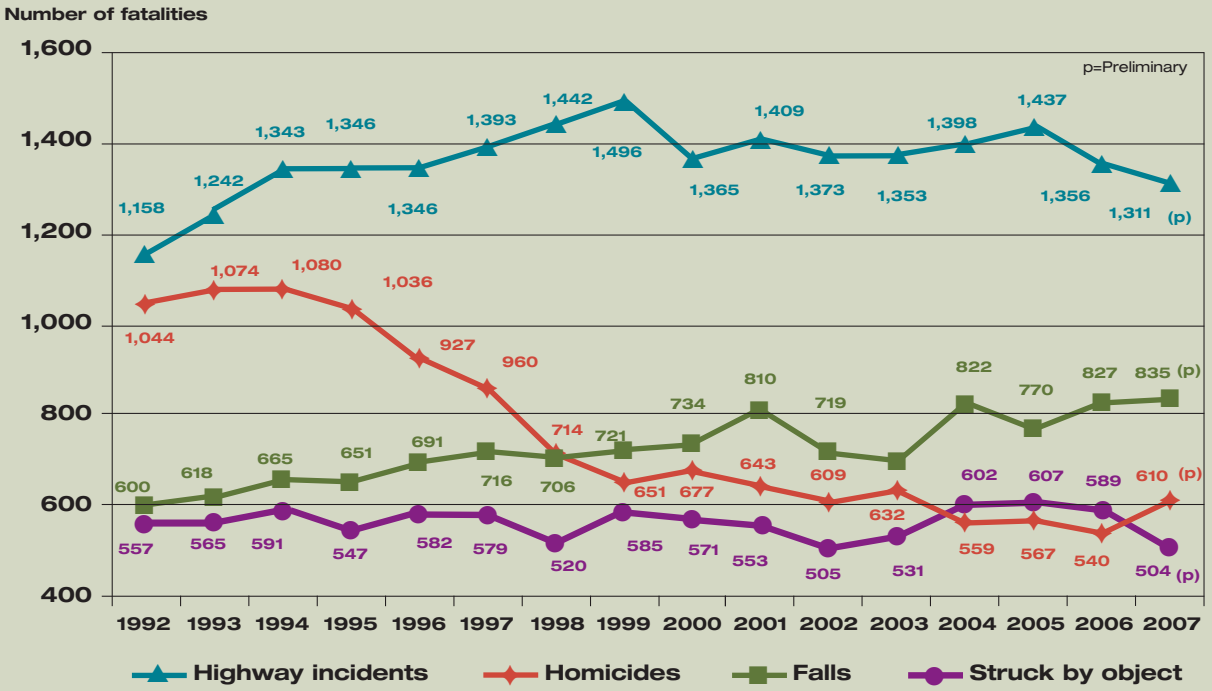
–Offer incentive awards to individual employees and work groups for achieving specific safety goals.

–Offer an incentive rebate program that places a projected amount of worker compensation dollars into an incentive pool and disburse to employees half the amount not expended.

Changing the Landscape

Changing the landscape for better health means equipping people with the resources to tend to basic health care needs. Objectives #7 and #8 address this issue.

FOUR MOST FREQUENT WORK-RELATED FATAL EVENTS, 1992–2007



Workplace homicides have declined over 40 percent since 1994, while fatal falls have trended higher. For the first time since 2003, homicides outnumbered struck by object fatalities as the third most frequent fatal event in 2007.

NOTE: Data from 2001 exclude fatalities resulting from the September 11 terrorist attacks.

U.S. Bureau of Labor Statistics. Census of Fatal Occupational Injuries (CFOI). Current and Revised Data. http://www.bls.gov/iif/oshwc/cfoi/cfch0006.pdf. Accessed February 17, 2009.[84]

HEALTHY WORKFORCE OBJECTIVE #7: INCREASE THE PROPORTION OF PEOPLE WITH HEALTH INSURANCE

The U.S. Census Bureau reports that 47 million Americans lacked health insurance in 2006.[85] Since many children in low-income families and virtually all U.S. citizens aged 65 and older are covered by public health insurance programs, most of this coverage deficit falls on working Americans, and specifically those working for small businesses. In fact, while only a tiny fraction of those employed at large firms lack health benefits, nearly a third of those working for firms with 25 or fewer employees do not have health insurance. The *2000 Small Employer Health Benefits Survey* found that the high cost of insurance is the primary reason many small businesses (e.g., those with 2 to 50 employees) do not offer health benefits. However, the survey identified several important misconceptions on the part of small employers that compound affordability problems.[86] For example, 57 percent of small employers were unaware that their contributions toward employee health coverage are tax deductible. Almost half (48 percent) did not realize that their employees cannot deduct health insurance premiums when they purchase coverage on their own. Similarly, many small employers were unaware of new rights granted to them through state and federal legislation. About two-thirds (67 percent) of small employers, for example, were unaware that their insurers cannot legally deny them group coverage even if their employees have pre-existing illnesses (although they may charge higher insurance premiums).[87]

Insurance coverage, while costly, is an investment with potential for significant return. Small employers who provide health benefits offer sound business reasons for doing so. The business rationale includes the following:

- Helps increase employee recruitment.
- Improves employee retention.
- Increases productivity by keeping employees healthy.
- Reduces absenteeism by keeping workers healthy.
- Improves employee attitude and performance.

Health insurance is important because it affects both Americans' access to necessary health care and their financial well-being. Uninsured children and adults are much more likely than those with insurance to skip recommended medical tests or treatments. Consequently, the uninsured also are more likely to be hospitalized for conditions that might have been prevented or detected earlier and are diagnosed at a more advanced stage of a disease. In addition, almost 30 percent of uninsured adults say that medical bills have had a great impact on their families' lives.[88]

HEALTHY WORKFORCE OBJECTIVE #8: INCREASE THE PROPORTION OF INSURED PERSONS WITH COVERAGE FOR CLINICAL PREVENTIVE SERVICES

In addition to no coverage at all, a second insurance problem is inadequate coverage of clinical preventive services (i.e., services that identify risks associated with specific diseases or identify health conditions in their early stages when treatment outcomes have a higher rate of success). Currently, preventive health services are underused in the United States,[89] and it is well documented that individuals who lack coverage for specific preventive services are significantly less likely to receive them than their insured peers.[89–91] In addition, the use of high copayments/coinsurance for preventive services creates additional barriers to accessing evidence-based services. As purchasers of most of the nation's private health insurance, employers are in a position to expand Americans' access to these potentially life-saving services substantially and improve employee health in the process.[92]

The U.S. Preventive Services Task Force (USPSTF), supported by the Agency for Healthcare Research and Quality is tasked with identifying a core set of preventive services known to improve health. The USPSTF recommendations are so highly regarded that they have

been called the "gold standard" to which employers and health plans should refer when designing benefit programs.[93] High value preventive services that employers should consider are identified on the next page. Experts recommend that employers, based on such factors as the age of the covered population, gender, and health status, select preventive services that best address the health needs of their respective populations.

- **Strategies:**
  - –Form or participate in purchasing cooperatives to negotiate for affordable health insurance premiums and health plans that cover appropriate clinical preventive services.
  - –Reduce costs and barriers (e.g., high copayments) to clinical preventive services within health benefit plans.
  - –Administer COBRA provisions fully for those affected by a qualifying event.
  - –Exclude preventive screenings from annual deductible limits within High Deductible Health Plans (HDHPs).
  - –Provide benefit credits to HSAs or HRAs for employees who comply with clinical screening guidelines.
  - –Offer group health plan coverage or a Medical Saving Account (MSA) option that is paid fully by employees (only as an alternative for small employers who cannot otherwise offer employees health benefits).

50 Optional Health Objectives for Employers

While the eight *Healthy Workforce Objectives* may be of primary interest to most businesses, Partnership for Prevention identified an additional 50 objectives that call specifically on U.S. employers to take action. Any or all of these could be adopted as part of a comprehensive worksite health promotion program. These 50 objectives are listed in Appendix 1 where they are grouped according to the elements of a comprehensive worksite health promotion program, as defined by *Healthy People 2010.*[1]*

WORKSITE HEALTH ASSESSMENTS AND TARGETED INTERVENTIONS

Caterpillar, Inc.
Healthy Balance[94]

Objectives:

- Provide an integrated approach to employee health management: physician/hospital networking, pharmacy management, disability management, and health promotion.
- Engage all employees to participate in company-sponsored interventions based on their level of risk.
- Implement a HRA/screening program that focuses on risks associated with metabolic syndrome.

Strategies:

- Offer all employees annual health risk appraisal and biometric screenings: fasting lipid profile, blood pressure, blood sugar, and waist circumference.
- Provide a $75 monthly incentive for HRA participation.
- Through the company's proprietary risk engine, identify individuals for targeted interventions associated with metabolic syndrome and other health conditions.
- As part of the disease management program, provide onsite health coaching and integrated online resources.

Outcomes:

- HRA completion rates average 93 to 94 percent.
- Since 2002, the company has experienced a 1 percent cost trend in health care spending, compared to 7 percent before the program was implemented.

RANKINGS OF CLINICAL PREVENTIVE SERVICES

The National Commission on Prevention Priorities analyzed the relative health impact and cost-effectiveness of 25 preventive services recommended by the U.S. Preventive Services Task Force (USPSTF) and the Advisory Committee on Immunization Practices (ACIP). Based on this assessment, preventive services were ranked on a scale from 2 to 10 (with 10 indicating the highest impact, highest value, most effective cost services).[95]

Rankings of Clinical Preventive Services for the U.S. Population	CPB	CE	Total
Discuss daily aspirin use—men 40+, women 50+	5	5	10
Childhood immunizations	5	5	
Smoking cessation advice and help to quit—adults	5	5	
Alcohol screening and brief counseling—adults	4	4	8
Colorectal cancer screening—adults 50+	4	4	
Hypertension screening and treatment—adults 18+	5	3	
Influenza immunization—adults 50+	4	4	
Vision screening—adults 65+	3	5	
Pneumococcal immunizations—adults 65+	3	5	
Cholesterol screening and treatment—men 35+, women 45+	5	2	7
Cervical cancer screening—women	4	3	
Breast cancer screening—women 40+	4	2	6
Chlamydia screening—sexually active women under 25	2	4	
Discuss calcium supplementation—women	3	3	
Vision screening—preschool children	2	4	
Folic acid chemoprophylaxis—women of childbearing age	2	3	5
Obesity screening—adults	3	2	
Depression screening—adults	3	1	4
Hearing screening—adults 65+	2	2	
Injury prevention counseling—parents of children 0-4	1	3	
Osteoporosis screening—women 65+	2	2	
Cholesterol screening—men <35, women <45 at high risk	1	1	2
Diabetes screening—adults at risk	1	1	
Diet counseling—adults at risk	1	1	
Tetanus-diphtheria booster—adults	1	1	

INTERPRETING THE SCORES

Services that produce the most health benefits received the highest CPB score of 5.

Cost-saving services received the highest CE score of 5.

Scores for CPB and CE were then added to give each service a possible score between 2 and 10.

SCORING RANGES

Score	CPB Range: QALYs saved, undiscounted
5	360,000
4	185,000 – 360,000
3	40,000 – 185,000
2	15,000 – 40,000
1	15,000

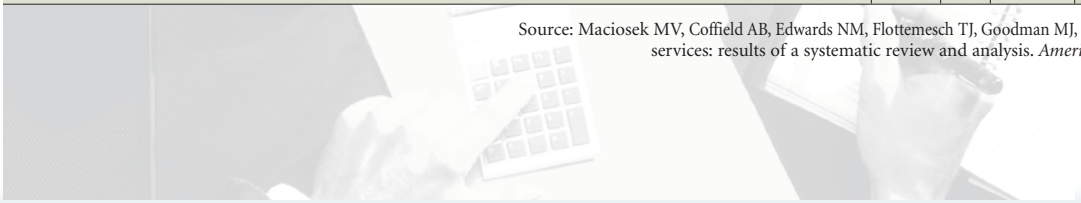
Score	CE Range: $/QALY saved, discounted
5	Cost-Saving
4	$0 – 14,000
3	$14,000 – 35,000
2	$35,000 – 165,000
1	$165,000 – 450,000

CPB: clinically preventable burden

CE: cost effectiveness

QALY: quality adjusted life year

Source: Maciosek MV, Coffield AB, Edwards NM, Flottemesch TJ, Goodman MJ, Solberg LI. Priorities among effective clinical preventive services: results of a systematic review and analysis. *American Journal of Preventive Medicine*. 2006;31(1):52–61.[95]



Below are examples of these objectives, each target goal, and baseline measure.

Physical Activity

–**Goal:** Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.

–**Target:** 50 percent

–**Baseline:** 32 percent of adults aged 18 years and older were active for at least 30 minutes 5 or more days per week in 1997

Nutrition

–**Goal:** Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.

–**Target:** 75 percent

–**Baseline:** 28 percent of persons aged 2 years and older consumed at least two daily servings of fruit in 1994–96

Tobacco Control

–**Goal:** Increase smoking cessation attempts by adult smokers.

–**Target:** 75 percent

–**Baseline:** 41 percent of adult smokers aged 18 years and older stopped smoking for a day or longer because they were trying to quit in 1997

Weight Management

–**Goal:** Increase the proportion of adults who are at a healthy weight.

–**Target:** 60 percent

–**Baseline:** 42 percent of adults aged 20 years and older were at a healthy weight (defined as a BMI equal to or greater than 18.5 and less than 25) in 1988–94

Alcohol

–**Goal:** Reduce the proportion of adults who exceed guidelines for low-risk drinking.

	1992 Baseline	2010 Target
Females	72	50
Males	74	50

Workplace Injury Prevention

–**Goal:** Reduce activity limitation due to chronic back conditions.

–**Target:** 25 adults per 1,000 population aged 18 years and older

–**Baseline:** 32 adults per 1,000 population aged 18 years and older experienced activity limitations due to chronic back conditions in 1997

* As modified by the *Healthy People 2010 Midcourse Review*.[96]

ELEMENTS OF A COMPREHENSIVE WORKSITE HEALTH PROMOTION PROGRAM

As defined by *Healthy People 2010,* a comprehensive worksite health promotion program contains five program elements[1]:

1. Health education, which focuses on skill development and lifestyle behavior change along with information dissemination and awareness building, preferably tailored to employees' interests and needs.
2. Supportive social and physical environments. These include an organization's expectations regarding healthy behaviors, and implementation of policies that promote health and reduce risk of disease.
3. Integration of the worksite program into your organization's structure.
4. Linkage to related programs like Employee Assistance Programs (EAPs) and programs to help employees balance work and family.
5. Worksite screening programs, ideally linked to medical care to ensure follow-up and appropriate treatment as necessary.

In addition, Partnership for Prevention includes two additional components[9]:

6. Support for individual behavior change with follow-up interventions.
7. Evaluation and improvement processes to help enhance the program's effectiveness and efficiency.

Section 4
Program Planning

The successful planning and implementation of a worksite health promotion program depends on a number of interrelated factors such as: company size, the number of work locations, demographics, health benefit design, health- and safety-related policies, budget, and organizational culture. For example, an organization that is contemplating developing a comprehensive program may consider implementing the whole process, whereas an organization that is considering modifying an existing program, may consider only a part, such as policy development.

This section reviews key elements of a comprehensive worksite health promotion program, important special considerations, and a planning process that can be adapted to your organization's unique needs.

Establishing A Comprehensive Worksite Health Promotion Program

As defined in the sidebar, results from the *2004 National Worksite Health Promotion Survey* (NWHPS) indicate that "only 6.9 percent of worksites offered a comprehensive worksite health promotion program defined as a program incorporating all five key elements defined in *Healthy People 2010*."[9] The *2004 NWHPS* also found that worksites with at least 750 employees, compared to smaller worksites, were 6.7 times more likely to offer a comprehensive health promotion program.

While it would be ideal if all businesses developed comprehensive health promotion programs immediately, this goal may not be realistic. Many employers, especially small to mid-size firms, may find it difficult—or impossible—to launch a comprehensive health promotion program all at once. That's okay. Employers can start with just one or two of the five core components. The most important thing is simply to get started. While only 6.9 percent of worksites offer a comprehensive program, more than 41.3 percent offer programs that are linked to related core components.[9] The challenge—and therefore the opportunity—is to use that foundation to build a comprehensive health promotion program over time.

Special Considerations

AVOID ONE-TIME EVENTS, ENCOURAGE ONGOING PROGRAMMING

Employers are encouraged to offer ongoing activities, A single, isolated promotion, such as half-day smoking cessation clinics or "fun runs" with no follow-up, does not constitute a comprehensive approach to employee health. By including and linking together more elements such as annual HRA promotions, year-round activity campaigns, and health education and screening, organizations are more likely to increase overall participation, employee engagement, and ultimately, achieve program goals.

CONSIDER PROFESSIONAL STAFFING AND/OR CONTRACTED VENDORS

Having professional staff to plan and manage your organization's health promotion activities is recommended. Staffing options include full-time staff or contracting with third-party vendors such as wellness management companies and health coaching firms. The advantages of this approach are institutionalizing health promotion within the work culture and reducing access barriers to credible/professional support.

In addition, the *2004 NWHPS* showed companies that had a dedicated staff person were 10 times more likely to have a comprehensive worksite health promotion program compared to companies that did not have a staff person dedicated to health promotion. This finding was independent of size, experience, and industry type.[9]

However, for most small- to medium-size companies, this may not be economically feasible. In this case, organizations are encouraged to participate in local worksite health coalitions that can pool resources for annual events such as HRAs/screening programs, flu immunizations, and telephonic/online health coaching services.

PARTICIPATION IS AN IMPORTANT METRIC FOR WORKSITE HEALTH PROMOTION PROGRAMS

Employee participation is essential if employers are to realize the health and financial rewards of health promotion activities. Thus, employers are encouraged to develop a system to track program participation rates. See next page.

MANAGEMENT SUPPORT AT ALL LEVELS, IS IMPORTANT TO PROGRAM SUCCESS

Ongoing management support and accountability are critical to successful worksite health promotion programs. Leadership begins at the top through senior management support and the alignment of business and employee health goals. Testimony to this practice is echoed in Partnership for Prevention's *"Leading by Example"* initiative—a CEO to CEO program that recruits business leaders who promote the total value of worksite health to the business community.[14]

Another method of implementing worksite health initiatives is to get middle managers involved within their respective locations. For example:

- Managers within The Dow Chemical Company are accountable for the success of health promotion initiatives through written business objectives.[81]
- Raytheon's *Mission: Health Wellness Program* established an internal award system (e.g., gold, silver, bronze) for worksites that actively engage in supporting and improving the health of employees. The program encourages sites to implement Raytheon wellness initiatives, promote and demonstrate site leadership support for a culture of health and well-being, and drive employee participation and engagement.[97]

SUSTAINED PARTICIPATION RATES AND PROGRAM SUCCESS

Participation rates are a relatively simple litmus test that can help program leaders, as well as management, gauge vendor performance and benchmark employee engagement within sponsored health promotion programs.

Research conducted by the University of Michigan Health Management Research Center (HMRC) has shown that the more an employee participates in health promotion activities, the less employers pay in health- and productivity-related costs.

The HMRC recommends the following participation benchmarks for comprehensive employee health promotion programs[6]:

- 50 percent of the eligible population should participate in at least one wellness activity such as an HRA.
- 90 percent to 100 percent of the eligible population should participate in at least one wellness activity over a given three-year rolling period.
- 80 percent of the eligible population should engage in a minimum of two wellness activities within a three to four year period.
- 60 percent of the eligible population should engage in a minimum of three health promotion activities within a five-year period.

A related study conducted by Serxner and colleagues found a "dose response" relationship between health promotion activities and health care costs.[98]

- Participants in an HRA program cost employers $212 less than eligible nonparticipants.
- A greater cost savings was realized as serial participation in a health risk appraisal program was sustained. Cost savings of $83, $173, and $543 was realized between those completing 1, 2, and 3 or more HRAs, respectively.
- Participants who engaged in both an HRA and other wellness activities within a specified period of time had greater overall cost savings compared to single activities or to nonparticipants.

The bottom line? Motivating your target population to participate in a number of wellness activities within a specific time period (e.g., 12–24 months) is critical for realizing desired outcomes such as risk reduction, risk avoidance, reduced health costs, and improved productivity measures.

The Operational Program Planning Pyramid

Each level supports the one above, creating opportunities for more effective targeted interventions.

Level 4. Special Health Needs

Special Health Needs

–Disease Management
- Asthma
- COPD
- Depression
- Diabetes
- Heart disease

–Case management
–Disability management
–Employee assistance
–Behavioral health
–Health concierge
–Prenatal education
–Work hardening
–Ergonomics

Level 3. Risk Reduction Programming

Targeted Interventions

–Referral from HRA system based on risk profile (tobacco use, overweight/obesity, low physical activity, stress management, nutritional counseling, etc.)
–Targeted interventions based on learning style and stage of readiness
- health coaching: face-to-face, telephonic, online
- risk-specific print and online applications
- topic-specific group workshops

Level 2. Risk Avoidance/Wellness Programming

HRA System
–Biometric screening
–HRA
–Interpretation/referral
–Health coaching/risk avoidance

Health Education/ Awareness
–Lifestyle/wellness management
–Job and personal safety
–Mental health/stress management
–Benefit education
–Medical self-care

Information and Support
–Resource lists (e.g., EAP, work/life)
–Telephonic (e.g., benefits, EAP, work/life)
–Online resources

Level 1. Organizational Readiness and Engagement

Organizational Supports
–Senior management support
–Alignment with business goals
–Middle management/supervisor accountability
–Lay leadership networks
–Wellness champions

Policy Development
–External-compliant
–Internal-compliant
–Health-engaging

Benefit Design
–Affordability/access
–Incentives
–Reduction of barriers
–Value-based investments

Environmental Supports
–Walking trails
–Bike racks/barns
–Stairwell programs
–Healthy food options

Level 1. Planning Process

Preassessment
–Demographics
–Organizational structure/locations
–Culture
–Resources
–Benefit design
–Health/Safety policies
–Medical claims
–Disability (STD/LTD)
–Absenteeism
–Presenteeism
–Injuries/workers' compensation
–HRA data (e.g., risk distribution)
–Employee surveys
–Health initiatives, current and past
–Communications/channels
–Benchmarking
–Best practices

Planning
–Cross-functional team
–Business goals
–Program mission/alignment
–Identify strengths and gaps
–Identify/prioritize needs
–Goals/objectives
–Program options (see levels)
–Organizational engagement and support components
–Incentive options
–Staffing needs/reporting
–Vendor specifications
–Data management
–Implementation/marketing
–Evaluation design
–Operating budget
–Schedules
–Business case to management

Program Development
–Operational Plan
–Benefit redesign
–Incentives
–Core communications
–Risk assessment tools
–Targeted risk reduction interventions
–Disease management
–Injury prevention
–Vendor selection
–Data management systems
–Evaluation instruments
–Marketing campaign
–Orientation meetings
- management
- employees

Program Implementation
–Marketing/promotion
–Distribution (newsletter/books)
- home mailing
- work distribution
- online distribution

–Orientation meetings
–Screenings/health fairs
–Classes (e.g., lunch and learn)
–Coaching (e.g., high-risk)
–Special events
–Scheduling

Program Management
–Day-to-day operations
–Accountabilities
–Administrative procedures
–Scheduling
–Vendor coordination
–Data management integration

Program Evaluation
–Data sets/collection
–Data input
–Data analysis
–Report generation
–Dashboard metrics
–Recommendations

Adapted and used with permission from: Pfeiffer GJ. Four building blocks to program success. *Worksite Health.* 1995;1(3):25–28.[99]

The Operational Program Planning Pyramid

One approach to program planning is based on using the Operational Pyramid Planning Model shown on the previous page. In this model, critical elements of program planning (Level 1: Organizational Readiness and Engagement) are integrated with population-specific programming (Levels 2 through 4). Each level is organized hierarchically based on program goals and respective targeted populations. As such, each subsequent level (Levels 2 through 4) addresses smaller sub-populations (e.g., smokers, diabetics) that require more customized interventions and marketing campaigns that maximize participation and engagement.

Getting Started

The description of the *Operational Program Planning Pyramid* provides a context by which program planning can be framed. The remainder of this section will focus on key steps in the planning process, as well as important considerations in the areas of health benefit design, leadership, policy formation, and the role of a "culture of health[42]" in building a solid foundation and driving desired outcomes.

Create a Planning Team

Before starting the planning process, it is recommended that organizations, depending on size and the comprehensiveness of their health management efforts, create a Human Capital Team (HCT).[100] The HCT uses a cross-functional approach that pools the expertise of various human capital personnel (e.g., employee benefits, corporate medical, employee wellness, health and safety, employee assistance) who have a vested interest in employee health. The rationale for the HCT concept is that employee health management is a complex system with many silos that need to be aligned with the business goals of the organization and integrated in service, delivery, and accountability.

In the case of smaller organizations, a less formal employee wellness committee is recommended to assist in the planning process and bring a sense of ownership to those involved.

LEVEL 1: ORGANIZATIONAL READINESS AND ENGAGEMENT

Level 1: Organizational Readiness and Engagement serves as the base of the *Operational Program Planning Pyramid.* By building a solid foundation—from pre-assessment through program evaluation—programming has a greater chance of being aligned with overall business goals. The following is a brief overview of each planning step.

Preassessment. This first step is critical in helping organizations identify program needs by assessing their available data sources, benefits offerings, and current health management efforts. Depending on an organization's size, and such factors as health benefit design and health/safety policies, the depth of assessment within this step will vary. Some organizations conduct comprehensive internal and external benchmarking exercises while others use simple assessments to establish baselines for program planning and future evaluations. Regardless, a gathering and analysis of pertinent data sources is important, not only for identifying weaknesses and gaps in current health management practices, but also for identifying program and organizational strengths.

Data Sources. Depending on such factors as company size, the sophistication of its data management system(s), and resources, there are a number of data sources that can be used during the preassessment process.[16,36,42] They include:

- Health claims data—total health care cost per employee per year and top ten leading physical and mental health claims by condition
- Pharmacy data
- Absenteeism data

- Accident reports
- Short-term and long-term disability claims
- Workers' compensation claims
- HRA data
- Presenteeism data through self-reported surveys for selective health conditions such as diabetes and heart disease
- Review of current health promotion activities such as participation and completion rates of specific initiatives
- Employee turnover reports
- Employee surveys and needs assessments

Benchmarking Your Current Health Management Practices. Benchmarking can be defined as "the process of improving performance by continuously identifying, understanding, and adapting outstanding practices and processes found inside and outside the organization."[101] Benchmarking can act as a pre-assessment tool for helping organizations that are considering a health promotion program establish a planning framework to expand or recalibrate efforts for existing programs.

The "*Health Management Initiative Assessment,*" shown on page 36, is a simple tool that can provide a cursory assessment of your organization's current health management practices. This one-page assessment has been shown to be a valid and reliable instrument for helping organizations not only assess their organization's commitment to employee health, but also provide a snapshot of the breadth and comprehensiveness of current initiatives.[14]

Planning. Within this step, the information gathered from the pre-assessment (e.g., data analysis, benchmarking) and other inputs are used to define the program framework. As an HCT consider the following:

- What is your business?
- What are your organization's primary business goals?
- How does your function(s) align with your organization's business goals?
- How do you provide value (promote health) to your organization?
- How do you measure success against your business goals (benchmark)?

Once you have answered these questions, use the results of the assessment to:

- Identify strengths, weaknesses, and gaps within your current health management practices.
- Prioritize key issues (e.g., escalating health care and disability costs) related to business goals.
- Identify key issues that have the greatest opportunities to provide value to the organization.
- Identify potential solutions such as benefit design, policy formation, incentives, and specific interventions.
- Select the best solution(s).
- Prepare a working plan that includes programming specifications, branding, staffing needs, vendor specifications, data requirements, evaluation design, operating budget, and timelines for implementation.
- Make the business case to senior management.
- Adjust the plan as required.

Program Development. Within this step, the specifications from program planning are materialized into an operational plan. Again, depending on the comprehensiveness of proposed initiatives, an operational plan may include the following elements:

- Recruitment and training of staff
- Development of employee communications including promotional materials, health newsletter, online health portal, targeted risk modules
- Development of management communications/ presentations that outline business rationale, program elements, and accountabilities
- Selection of HRA tool/vendor
- Vendor selection (biometric screenings, health coaching, disease management, fitness facility, etc.)
- Development of data management/evaluation system
- Organizational/cultural supports (see page 37)

- Benefit redesign in selected areas such as health benefit credits for participation (see page 39)
- Policy development for health and safety issues (refer to pages 38 through 42)
- Master schedule

Program Implementation. This step involves the implementation of the operational plan. Depending on such variables as the comprehensiveness of the initiative and the number of worksites, the organization may choose to conduct a pilot program, a phased implementation, or a company-wide launch. Important elements within the implementation stage include:

- Program marketing and promotion
- Senior management involvement in introducing/communicating the program
- Vendor coordination (if applicable)
- Coordination and distribution of program materials (e.g., home mailings)
- Scheduling and coordination of onsite events, such as health screenings, group orientations, health fairs, workshops, and other special events.
- Data management

Program Management. This step addresses the day-to-day management of the health promotion program/initiative and includes such elements as:

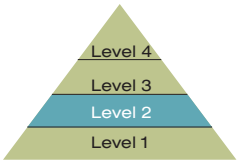
- Processes for managing health promotion offerings (e.g., health screenings, classes, health coaching, communications)
- Administrative procedures for staffing and scheduling needs
- Vendor relations
- Quality assurance processes
- Data collection and assessment policies, processes, and procedures
- Processes for developing a reporting system to employees

Program Evaluation. This final step provides an ongoing evaluation process based on outcome measures (e.g., participation rates, average health care cost per employee per year) that were defined during the planning step. In addition, program evaluation provides valuable information not only to management, but also to your eligible population(s). Therefore, data transparency is an important consideration.

- In the case of large worksites, data management and evaluation is commonly done through third-party vendors that collect, assemble, and interpret data.
- For small to mid-size worksites, program evaluation can cost more than programming, thus simpler measures such as participation rates, satisfaction surveys, and HRA aggregate reports, can provide meaningful information, benchmark progress, and guide future program decisions.
- Sharing results with your eligible population through an annual "Health Report Card" and other company communications.
- Create a health dashboard: key health and productivity indicators presented to management on a periodic basis.
- Keep in mind, effective program planning begins with appropriate data and proceeds to a step-by-step process that builds a solid foundation for addressing the health and safety needs of your entire population effectively. Effective planning also considers the importance of such elements as management support, culture, health benefit design, policies, incentives, and environmental supports that drive program goals and outcomes successfully.

LEVELS 2-4: POPULATION-SPECIFIC PROGRAMMING

Based on the planning process outlined in *Level 1: Organizational Readiness and Engagement,* Levels 2 through 4 describe the specific program components and interventions that address specific employee/dependent populations. As one moves "up" the pyramid, interventions become more targeted (e.g., risk reduction or disease management). The following are descriptions of Levels 2 through 4.

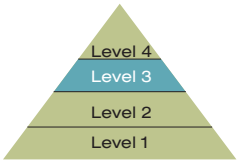


LEVEL 2: RISK AVOIDANCE/ WELLNESS PROGRAMMING

The ultimate goal of Level 2 is to have 100 percent of the *total* eligible population exposed and engaged in core programming that includes an HRA, biometric and preventive screenings, one-on-one health coaching/HRA interpretation, immunizations, health education (physical activity, nutrition, stress management, personal safety), job safety, medical self-care, and work/life balance. As such, this level creates a behavioral skill foundation grounded in primary prevention, self-care, and lifestyle-management.

Programming strategies:

- Provide an appraisal system (HRA, biometric screening, and coaching) that stratifies the eligible population according to health risk (e.g., physical inactivity, tobacco use). For example, the University of Michigan Health Management Research Center classifies HRA participants according to the following levels[6]:
  - –Low Risk: 0–2 risk factors
  - –Medium Risk: 3–4 risk factors
  - –High Risk: 5 or more risk factors
- Provide core health promotion, job safety, and work/life balance strategies that reinforce and reward risk avoidance and health maintenance, with the goal of keeping the majority of the population healthy and at low risk.
- Provide medical self-care education to build health consumerism skills and reduce inappropriate medical utilization.



LEVEL 3: RISK REDUCTION PROGRAMMING

Based on Level 2 programming and condition-specific assessments, a portion of the population (30 percent to 40 percent[6,42]) is identified as moderate to high risk. Targeted interventions (e.g., for tobacco cessation, overweight/obesity, or physical inactivity) are provided to these risk groups through a combination of printed, online, group, telephonic, and/or face-to-face coaching options.

Programming strategies:

- Provide appropriate information and support to at-risk populations either to reduce their risk(s) or keep them from "getting worse.[42]"
- Control modifiable risks (e.g., tobacco use, obesity, inactivity) to reduce the incidence of chronic health conditions (e.g., coronary artery disease, diabetes, COPD) and prevent migration to *Level 4: Special Health Needs.*
- Reduce excess health- and productivity-related costs associated with a moderate- to high-risk status.

LEVEL 4: SPECIAL HEALTH NEEDS

Through HRA data, disease specific assessments, health and pharmacy claims, and/or predictive modeling, individuals can become eligible for specialized disease management programs (e.g., asthma, cardiovascular disease, diabetes) that may include one-on-one coaching and printed/online information and support. Other programs, such as disability management, prenatal education, and employee assistance, also can be offered depending on the needs of the population.

Programming strategies:

- Provide appropriate information and support to individuals with chronic health conditions as well as to special populations (e.g., expectant parents, elder caregivers).
- Reduce cost and access barriers to appropriate treatment.
- Improve compliance and adherence to evidence-based interventions (e.g., medication therapies, self-management) to improve clinical outcomes and reduce adverse medical events and associated costs.

Please note: An individual who requires *Level 3: Risk Reduction* Programming or *Level 4: Special Health Needs* is not precluded from the previous programming level(s). Programming is accumulative. For example, an individual requiring disease management programming (e.g., diabetes) most likely has elevated risks (e.g., overweight and physically inactive) and would benefit from risk-reduction programming as well as ongoing Level 2 core programming. Therefore, during the planning process, it is important to design an integrated system in which each level builds on the previous level.

Health Management Initiative Assessment

Mark the circle that best describes your organization.

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Mission	■ Our senior management is committed to health promotion as an important investment in our human capital.	❍	❍	❍	❍	❍
	■ Our health and productivity strategies are aligned with our business goals.	❍	❍	❍	❍	❍
	■ All levels of management are educated about the link between employee health and productivity and total economic value.	❍	❍	❍	❍	❍
	■ Our employees are educated about the real cost and total value of personal health and its impact on business success.	❍	❍	❍	❍	❍
Data Management	■ We have identified the leading physical and mental health conditions among our employees and know their related direct and indirect costs.	❍	❍	❍	❍	❍
	■ We try to capture and link key medical costs with indirect costs such as disability, sick days, and workers' compensation claims.	❍	❍	❍	❍	❍
Benefit Design	■ Our health benefits support prevention, risk reduction, and disease management, and are free of barriers to evidence-based interventions.	❍	❍	❍	❍	❍
	■ Our incentives support employee responsibility and motivate employees to stay healthy, reduce high-risk behaviors, improve clinical measures, and/or adhere to disease management regimens.	❍	❍	❍	❍	❍
Supportive Environment	■ To encourage employee fitness, we subsidize gym memberships and/or provide onsite fitness facilities; walking trails; and well-lit, accessible stairwells.	❍	❍	❍	❍	❍
	■ We provide healthful food selections in our vending machines/cafeteria.	❍	❍	❍	❍	❍
	■ We provide a safe, clean, and tobacco-free work environment.	❍	❍	❍	❍	❍
	■ An employee leadership network supports our health management programs.	❍	❍	❍	❍	❍
Programming	■ We have a tobacco-free workplace.	❍	❍	❍	❍	❍
	■ We offer Health Risk Appraisals (HRAs) to all employees at least every three years with appropriate follow-up and referral.	❍	❍	❍	❍	❍
	■ We provide a variety of initiatives that support primary prevention (e.g., preventive health screenings, flu immunizations) and lifestyle management (e.g., physical activity, nutrition, stress management).	❍	❍	❍	❍	❍
	■ We provide education about medical consumerism and self-care.	❍	❍	❍	❍	❍
	■ We provide health risk reduction programs or resources (e.g., weight management, smoking cessation).	❍	❍	❍	❍	❍
	■ We provide disease management programs and/or resources targeted to conditions with high-cost productivity implications (e.g., asthma, diabetes).	❍	❍	❍	❍	❍
Evaluation	■ We measure program effectiveness by stated health/productivity goals. For example: 70 percent of our workforce is categorized as low risk.	❍	❍	❍	❍	❍
	■ Eighty percent of our workforce has participated in at least two company-sponsored health promotion programs within the past three years, including an HRA and a health improvement or risk reduction program.	❍	❍	❍	❍	❍

Based on your responses, does this assessment show weaknesses/gaps in your approaches to employee health management? How comprehensive are your current offerings? Refer to Section 3 and Section 4 for further information on strengthening your initiatives.

Planning and Creating a Culture of Health

In short, a culture of health is an integrated effort to align management support, benefit design, policies, environmental supports, and sponsored programs with the health goals of the organization.[42] More importantly, a culture of health communicates to the eligible population that, "Your health matters, not only to the health of our organization, but to your total value and well-being." The following are critical elements that contribute to a culture of health:

- Senior and middle management support and engagement
- A cross-functional, Human Capital Team (HCT) for program planning
- Goals and objectives that are transparent to the entire organization (e.g., annual health report card)
- Branded health management program (e.g., name/logo/mascot)
- A safe and clean workplace
- Affordable health insurance
- Respect for the privacy of individual health information
- Written policies, enforcement of Health Information Portability and Accountability Act (HIPAA) requirements
- Incentives to keep healthy employees healthy and support risk reduction and disease management practices
- Environmental supports to encourage physical activity, such as walking trails, showers, stairwell programs, onsite fitness centers, bike racks/barns for cyclists, and free pedometers
- Tobacco-free workplace
- Depending on the demographics and needs of specific populations: lactation rooms, quiet rooms, and onsite medical clinics
- Healthy, affordable food selections in cafeterias, vending machines, conference rooms, and offsite events
- Company policies on the provision of alcohol during company-sponsored events
- Sponsorship and active participation in community health events
- Removal or lowering of cost and access barriers to company sponsored programs and evidence-based interventions (e.g., preventive screenings, disease management)
- Lay leadership networks (wellness ambassadors) to help promote programs within their respective work groups
- Recognition and promotion of "wellness champions" who have succeeded in their own health pursuits or have motivated others
- Make health fun!

The Role of Policy Formation in Health Promotion Program Planning

In the planning and management of worksite health promotion programs, policy can act as either a lever or a barrier to successful programming. The following is a review on how health and safety-related policies can be used in program planning.

WHAT IS POLICY?

Policy is "a definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions."[102]

TYPES OF POLICY

Within organizations, policy can be classified as either external-compliant or internal-compliant. External compliant refers to an organization's efforts through written protocols that interpret, monitor, and enforce regulations from governmental or other outside agencies. Complying with minimum wage requirements, privacy of health information (HIPAA), safety regulations (OSHA), and the Americans with Disabilities Act (ADA) are examples of external-compliant policy functions. In other cases, external-compliant policies are administered to conform to local or state ordinances and professional trade or "watchdog" organizations.

Internal-compliant policies are created and enforced by the organization in order to achieve desired company goals, such as alcohol and drug policies to protect the health and safety of the workforce, mandatory safety belt use in company vehicles to reduce the risk of injury, and tobacco-free worksites as part of a broader tobacco control strategy. Internal-compliant policies also can support the value of human capital by supporting the organization's guiding principles, mission, and business goals.

Outside legislation also can affect internal-complaint policies. For example, the *Healthy Workforce Act of 2009* proposes a tax credit to employers for the costs of implementing worksite health promotion programs.[103]

POLICY AND OUTCOMES

As discussed, policy is intended to guide the achievement of desired outcomes (present and future) that benefit the organization as a whole. In policy study, there are two primary effects that a standing policy creates: intended and unintended.[104]

INTENDED EFFECTS

Policies are developed to achieve intended effects, or desired outcomes, such as reducing workers' compensation claims through adherence to safety procedures and mandatory safety meetings or increasing HRA participation by implementing an incentive program. In policy design, decision makers first need to define the intended effects that a policy would hope to achieve related to the existing issue.

UNINTENDED EFFECTS

Corporate policies often can produce unintended effects—unplanned consequences to the intended goal or outcome. A common example within worksite health management programs pertains to health benefit policies

that intend to manage health care costs (intended effect) by shifting a greater cost burden to employees and their dependents. The unintended effect(s) of cost shifting is that it can lead to lower compliance and adherence rates for preventive screenings or for medications to treat chronic conditions and, in turn, inadvertently increase adverse health events through undetected or poorly managed health problems.

COMMON HEALTH-RELATED POLICIES

The tables on pages 40 through 42 show some common external- and internal-compliant policies, their intended effects, and program planning recommendations for organizations to comply with or enhance their health- and safety-related efforts.

HEALTH BENEFIT DESIGN AND PROGRAM PLANNING

Many employee health promotion programs are part of a larger employee health benefit function. But commonly, the operational goals of health promotion and health benefits are not fully aligned with each other, let alone with the organization's business goals. However, this is changing, as health benefit managers are being challenged to manage escalating health care costs and realize the value of health promotion as a critical component of a total health management strategy. Two common approaches that align benefit design with health promotion include:

1. **Incentive programs** for keeping healthy employees healthy and motivating participants to reduce identified risk factors. For example, to drive greater participation rates in *Level 2: Risk Avoidance/ Wellness Programming* activities, organizations provide benefit dollars (contributions to Health Savings Accounts [HSAs] or Health Reimbursement Accounts [HRAs]) to employees and sometimes spouses, for complying with health risk appraisal programs, preventive screenings, and/or health coaching. The same incentives can be integrated within risk reduction and disease management programs. In addition, other common incentive programs include merchandise, cash cards, health club memberships, and prize drawings for reaching defined program goals.[42]
2. **Value-based benefit design** encourages organizations to make strategic investments in selective interventions/programs that have the greatest potential for realizing total value (e.g., decreased direct and indirect health-related costs) to the organization. A critical objective of value-based benefit design is to reduce cost and access barriers that may prevent participants from being fully engaged within a specific intervention. Current practices include the waiving of copays for preventive screenings and/or reducing copays for selective medications in the treatment of high-cost chronic health conditions, such as asthma and diabetes, or for tobacco cessation therapies.[105]

EXTERNAL-COMPLIANT POLICIES

POLICY INITIATIVE	INTENDED EFFECTS	HEALTH PROMOTION PRACTITIONER OPPORTUNITIES
Privacy of health information (HIPAA)[106]	■ Protect the privacy of health-related information of employees and family members. ■ To drive participation rates in HRA programs and lower levels of mistrust, assure employees and family members that health promotion data (HRA results) are being used appropriately.	■ Provide a "Privacy Statement" with HRAs, health screenings, health fairs, and health coaching. ■ Assure that privacy procedures regarding personal health information from coaching sessions (e.g., HRA data) are in a secure place. ■ To reduce employee mistrust, be "transparent." Present aggregate HRA data through group orientations and periodic "State of Health" reports.
The Omnibus Transportation Employee Testing Act[107]	■ Assure a drug- and alcohol-free workplace for transportation workers. ■ Reduce the risk of injury on the job due to impairment/abuse. ■ Enforce random drug/alcohol testing.	■ Drug and alcohol abuse education. ■ Stress management programs. ■ Programs for better sleep. ■ Energy and alertness management programs.
Family and Medical Leave Act (FMLA)[108]	■ Grant an eligible employee up to a total of 12 work weeks of unpaid leave during any 12-month period. ■ Support care-giving responsibilities without penalty of termination. ■ Allow medical leave when the employee is unable to work due to a serious health condition.	■ Provide well baby programs. ■ Provide eldercare information and support services/seminars. ■ Reinforce self-care skills for the management of health problems. ■ Stress management for caregivers.
Industry and Job Specific Guidelines (OSHA)[109]	■ Decrease on the job accidents. ■ Reduce workers' compensation claims. ■ Train employees on safety procedures specific to their industry/job.	■ Assist health and safety department on "industrial athlete" programs. ■ Provide ergonomic coaching at workstations. ■ Develop on-the-job exercise and stretching programs. ■ Develop healthy back programs.
Blood borne pathogen guidelines (OSHA)[110]	■ Protect workers in such professions as health care, fire and rescue, police, and housekeeping who have increased risk of exposure to blood and other bodily fluids. ■ Reduce the transmission of HIV and hepatitis B and C.	■ Be sure that third-party vendors responsible for onsite health screenings/health fairs comply with needle-stick and biohazard procedures. ■ Provide periodic education on HIV/AIDS and hepatitis through company communications.
Americans with Disability Act (ADA)[111]	■ Protect job applicants from discrimination due to physical and/or mental impairments. ■ Protect employees from discrimination due to physical and/or mental impairments.	■ Through health coaching, provide "adaptive programming" based on individual needs. ■ Provide adaptive exercise programs based on individual needs within onsite fitness centers.

INTERNAL-COMPLIANT POLICIES

POLICY INITIATIVE	INTENDED EFFECTS	HEALTH PROMOTION PRACTITIONER OPPORTUNITIES
Workplace violence	■ Protect employees from onsite violence, verbal abuse, and threats from fellow employees. ■ Protect the employee from the threat of an abusive partner or other employees. ■ Create a zero-tolerance policy.	■ Workplace violence issues are primarily the responsibility of corporate security and employee assistance in larger organizations. Health promotion practitioners can assist in offering: –Education on domestic violence and education on outside resources (e.g., hotlines/shelters). –Self-defense courses through the fitness center or other programs. –Buddy programs for walking to parking lots at night.
Seat belt use	■ Require full compliance when using or traveling in company vehicles. ■ Reduce the risk of injury on the job due to motor vehicle accidents. ■ Reinforce full compliance.	■ Inclusion of seat belt use within HRA. ■ Sponsor defensive driving classes. ■ Post "buckle up" signs in company parking lots. ■ Reinforce messages in company publications.
Health Risk Appraisal (HRA) with benefit credit	■ Increase HRA participation. ■ Promote health risk management. ■ Lower health risks/associated costs.	■ Develop and coordinate communication campaigns that promote and explain HRAs. ■ Defuse privacy concerns. ■ Coordinate workgroup presentations on aggregate results. ■ Develop a contest that rewards the highest percentage of participants/workgroup.
High Deductible Health Plan (HDHP)	■ Decrease employer costs. ■ Guide appropriate medical utilization. ■ Teach employees about the true cost of health care.	■ Implement a medical self-care program. ■ Provide "lunch and learns" on making informed medical decisions. ■ Leverage existing and custom communications (e.g., health newsletter, health Web site). ■ Reinforce medical consumer resources and benefits information.
Incentive programs	■ Improve participation within targeted programs such as HRAs, health screenings, risk reduction programs (e.g., smoking, weight management).	■ Depending on the level of incentive(s), promote programs through company communications. ■ Coordinate initiatives with benefit department so that incentives are related to health benefit credits or other benefit-related programs.
Free preventive screenings	■ Lower cost and access barriers. ■ Increase compliance with recommended preventive screenings. ■ Increase preventive screening participation rates.	■ Organize onsite health fairs/screenings. ■ Based on demographics, organize periodic targeted onsite screenings (e.g., mammography, PSAs) coordinated with national health events.

INTERNAL-COMPLIANT POLICIES

POLICY INITIATIVE	INTENDED EFFECTS	HEALTH PROMOTION PRACTITIONER OPPORTUNITIES
Value-based pharmacy design for selected chronic health conditions	■ Reduce cost and access barriers (e.g., lower copays or coinsurance) to selective medications for managing such conditions as diabetes, asthma, and hypertension. ■ Increase medication adherence. ■ Improve clinical outcomes. ■ Reduce direct and indirect health-related costs.	■ Reinforce and market company-sponsored disease management and health coaching services. ■ Develop information and support programs on improving adherence to medications, self-care, and lifestyle-related practices in managing chronic health problems.
Health management and wellness programs aligned with business goals	■ Reinforce to all levels of management that employee health is inextricably linked to productivity. ■ Hold management accountable for supporting employee health goals.	■ As part of a cross-functional team, provide ongoing aggregate reports regarding such measures as participation rates, and aggregate risk profiles. ■ Develop programming that is targeted to population health needs and that addresses the business needs of the organization.
Tobacco-free workplace	■ Eliminate tobacco use from company buildings/premises or allow only in designated locations (outside). ■ Reduce the risks of tobacco use to the user. ■ Reduce the risks of secondhand smoke. ■ Reduce health- and productivity-related costs.	■ Coordinate smoking cessation programs to coincide with the tobacco-free date. For example, six to 12 months prior to implementation. ■ With health benefits support and in conjunction with behavioral strategies, include pharmaceutical interventions and counseling for free/at reduced cost. ■ Reinforce the benefits of smoking cessation through communications.
Place higher prices on less healthy foods and subsidize healthier selections in company cafeterias, vending machines, and during company functions	■ Encourage healthier food selections. ■ Reduce risk of overweight/obesity. ■ Promote a healthier work culture.	■ Provide communications and workshops on healthier food selection. ■ Provide tips on healthy brown bagging. ■ Sponsor healthy food preparation through cooking demonstrations. ■ Combine food-related communication with messaging related to physical activity and behavior change.
Drug and alcohol policy	■ Drug-free workplace. ■ Reduce alcohol and substance abuse within population. ■ Responsible drinking practices.	■ Include questions about use of alcohol and illegal and prescription drugs in an HRA. Provide targeted resources provided in personal report. ■ Promote responsible drinking practices through health communications. ■ With EAP, promote guidelines for alcohol use during company-sponsored meetings/events. ■ Sponsor ongoing stress management programs. ■ Provide periodic self-assessment for alcohol use, drug abuse, and depression within company communications.

Section 5

Programming Matrices: Small, Medium, and Large Employers

The following four matrices—which focus on tobacco, alcohol/drug abuse, physical inactivity, and overweight/obesity, respectively—outline the five original components of a comprehensive health promotion program as defined by *Healthy People 2010*[1] (refer to page 28) with suggested strategies for each component category. Each matrix explains how organizations large and small can take positive steps to achieve these objectives and incorporate these five elements into their own programs. Each level, from minimum to optimum, builds upon the previous level to create a more in-depth strategy for addressing each intervention area.

Each column in the charts below represents a comprehensive health promotion program for each health topic. The more substantial the initiative (see minimum, moderate, and optimum in the charts below), the greater the impact on an employee population—and the greater the benefits to employers.

TOBACCO CONTROL
THE ELEMENTS OF A COMPREHENSIVE HEALTH PROMOTION PROGRAM

PROGRAM COMPONENTS	MINIMUM	MODERATE	OPTIMUM
Health education	■ Provide HRAs every 12 months, info and resources for healthy behavioral change, and medical self-care resources. ■ Locate and promote tobacco cessation resources and community support groups.	■ Targeted risk interventions—printed, online, and/or telephone cessation aides. ■ Subsidize approved cessation program(s). Provide tiered financial incentives for using cessation resources.	■ Provide health/behavior coaching (e.g., person-to-person, telephonic, online). ■ Provide full pharmaceutical options.
Supportive social and physical environments	■ Establish and communicate tobacco-free policies.	■ Provide healthy snacking options to satisfy quitters urges to eat; encourage employee support groups for tobacco cessation. ■ Through company communications, highlight success stories of employees who have successfully quit.	■ Provide space for/foster creation of after-hours employee support groups aimed at quitting tobacco use; create incentive program for those interested in quitting (e.g., HSA contribution).
Integration of the worksite program	■ Educate workforce on the impact of tobacco use on excess health care costs and its impact on business goals.	■ Provide a periodic "health scorecard" that tracks tobacco prevalence within your population.	■ Integrate tobacco cessation program with disease management interventions (e.g., asthma, COPD, and heart disease).
Linkage to related programs *–occupational health and safety* *–health benefits* *–employee assistance*	■ Through safety or departmental meetings, promote tobacco cessation programs. Provide easy-to-access information about tobacco use and increased risks with occupational hazards such as coal and textile dust. Use in safety meetings to provide concise awareness campaigns.	■ Provide custom messages pertaining to the benefits of tobacco and drug/alcohol cessation. ■ Prohibit tobacco use within company vehicles.	■ Through health benefit plan, waive or lower copays/coinsurance for approved pharmaceutical interventions and behavioral counseling. ■ Consider HSA contributions for nonsmokers.
Screening programs	■ Incorporate screening question(s) pertaining to tobacco use in company communications.	■ Encourage health plans to screen patients for tobacco use. Integrate "chart reminders" within provider network to screen patients for tobacco use.	■ Through benefit plan, reduce costs and access barriers to preventive screenings.

ALCOHOL/DRUG USE
THE ELEMENTS OF A COMPREHENSIVE HEALTH PROMOTION PROGRAM

PROGRAM COMPONENTS	MINIMUM	MODERATE	OPTIMUM
Health education	■ Provide HRAs every 12 months, info and resources for healthy behavioral change, and medical self-care resources. ■ Locate and promote appropriate resources and support related to alcohol/drug abuse (e.g. AA, NA, Al-Anon, etc.).	■ Provide targeted risk interventions—printed and/or online. ■ Establish an EAP.	■ Provide health/behavior coaching (e.g., person-to-person, telephonic, online); telephonic nurse line. ■ Offer behavioral health programs through your health plan or third-party contracts.
Supportive social and physical environments	■ Establish and communicate policies related to drug and alcohol use. For example, the provision/exclusion of alcohol during official company functions. ■ Establish and communicate drug-free policies. ■ Create a drug/tobacco-free workplace.	■ Provide drug and alcohol education to supervisors to counteract enabling behaviors. ■ Provide information relating to local outpatient support groups (e.g. AA, NA, Al-Anon).	■ Establish the worksite as a meeting center for an anonymous substance abuse treatment group (e.g., AA, NA).
Integration of the worksite program	■ Establish clearly defined goals and objectives related to reducing the prevalence of alcohol and drug-related health claims.	■ Periodically communicate to workforce the effect of drug and alcohol abuse on excessive health care costs, workers' compensation, and safety issues.	■ With senior management support, develop and use a health scorecard that is integrated and aligned with business goals.
Linkage to related programs *–occupational health and safety* *–work/life initiatives* *–Employee Assistance Program (EAP)*	■ Provide information related to internal (e.g., EAP) and external (e.g., AA, NA) resources for drug and alcohol abuse in departmental/safety meetings.	■ Provide and reinforce targeted messages of the risks of drug/alcohol abuse to personal/job safety, domestic violence, and depression.	■ Through EAP and behavioral health programs, establish policies and procedures for referring employees/dependents to interventions, while protecting confidentiality.
Screening programs	■ Provide screening questions in HRAs. ■ Provide self-screening questions within company communications (e.g., CAGE questionnaire for alcohol).	■ Implement and enforce pre-employment screening policies. ■ Implement and enforce random or scheduled drug and alcohol screening programs (e.g., transportation).	■ Encourage health plans/health care providers to screen for depression when patients have been identified with an alcohol or substance abuse issue.

PHYSICAL INACTIVITY
THE ELEMENTS OF A COMPREHENSIVE HEALTH PROMOTION PROGRAM

PROGRAM COMPONENTS	MINIMUM	MODERATE	OPTIMUM
Health education	■ Provide HRAs every 12 months, info and resources for healthy behavioral change, and medical self-care resources. ■ Locate and promote appropriate resources and support for physical activity.	■ Provide targeted risk interventions based on "stages of change.[112]" ■ Provide workshops on the benefits of activity and exercise.	■ Provide health coaching (e.g., person-to-person, telephonic, online).
Supportive social and physical environments	■ Open a conference room for after-hours exercise classes; negotiate health club discounts, promote walking trails, stairwell programs.	■ Provide showers and flexible work hours to allow for exercise, subsidized gym memberships, healthy selections in vending machines and company functions.	■ Create and sponsor employee athletic teams and activities; provide monetary incentives for achieving fitness goals (e.g., HSA contribution).
Integration of the worksite program	■ Involve a diverse group of employees in a broad planning effort to create ownership of the program (e.g., a Human Capital Team [HCT], wellness ambassadors).	■ Match the goals of the worksite program with the mission statement of your organization.	■ Using senior management support, develop and use a health scorecard that is integrated and aligned with business goals.
Linkage to related programs *–work-related injury/death* *–health insurance* *–preventive services*	■ Provide easy-to-access information about local programs and opportunities for physical fitness; integrate physical activity messages into safety meetings.	■ Provide custom publications pertaining to benefits of physical activity and maintaining a healthy weight and diet, job safety, and preventive services.	■ Establish a Human Capital Team (e.g., wellness, benefits, EAP) for strategic health promotion planning.
Screening programs	■ Include physical activity level questions within HRA questionnaires.	■ Provide fitness self-test guidelines (e.g., flexibility, strength, aerobic capacity) within company communications.	■ Provide physical fitness assessments such as body fat percentage, flexibility, muscle strength, and aerobic fitness through certified personnel.

OBESITY
THE ELEMENTS OF A COMPREHENSIVE HEALTH PROMOTION PROGRAM

PROGRAM COMPONENTS	MINIMUM	MODERATE	OPTIMUM
Health education	■ Provide HRAs every 12 months, info and resources for healthy behavioral change, and medical self-care resources. ■ Provide information and resources on healthy eating, regular physical activity, and weight control. ■ Locate and promote appropriate resources and support related to being overweight/obese	■ Provide a targeted weight control program (e.g., printed, online) based on "stages of change.[112]" ■ Subsidize membership fees for approved programs such as Weight Watchers®. ■ Provide periodic communications on the association between excess body weight and common health risks such as diabetes, heart disease, and hypertension.	■ Based on HRA results, triage individuals to one-on-one health coaching (e.g., person-to-person, telephonic, online). ■ Provide periodic workshops on preparing healthy meals, brown bags, and eating on the road.
Supportive social and physical environments	■ Provide healthy food options in vending machines. ■ Provide healthy food options during company meetings and outside functions. ■ Encourage daily physical activity through pedometer programs, walking trails, and encouraging stairwell programs.	■ Encourage regular physical activity, by providing showers and/or subsidized gym memberships. ■ Promote company-wide weight reduction contests with appropriate health education on safe weight reduction practices. ■ Highlight success stories of employees within company communications.	■ Provide nutritional information on all menu selections within company cafeterias. ■ Price less healthy food options higher in company cafeterias than healthier food selections. ■ Provide an in-house company fitness facility.
Integration of the worksite program	■ Involve a diverse group of employees in a broad planning effort to create ownership of the program.	■ Match the goals of the weight management/obesity program with the mission statement of your organization.	■ With senior management support, develop and use a health scorecard that is integrated and aligned with business goals.
Linkage to related programs *–occupational health and safety* *–disease management* *–health benefits* *–Employee Assistance Program (EAP)*	■ Cross-market related programs and opportunities, and integrate messages (e.g., risks of obesity, back care) into safety meetings.	■ Through EAP, promote stress management programs that include self-screening and referral for depressive symptoms.	■ Develop health benefit policies for medical interventions for the morbidly obese (e.g., gastric bypass, banding). ■ Provide weight control options within disease management programs (e.g., diabetes). ■ Establish a Human Capital Team (e.g., wellness, benefits, EAP) for strategic health promotion planning.
Screening programs	■ Conduct periodic weigh-ins and body mass index calculations with appropriate educational materials.	■ Provide the opportunity for employees to have body fat percentage measured by certified personnel. Provide interpretation session.	■ Based on waist circumference (>40 inches males and >35 inches women), refer participants for further screening for metabolic syndrome.

Section 6
Resources

This section lists many resources related to worksite health promotion programming. Included are textbooks, workbooks, and Web sites that provide detailed information to help plan, implement, and evaluate a comprehensive health promotion initiative. Contact information for several national nonprofit organizations and federal agencies that provide worksite health promotion materials and programs also is included.

Inclusion in the resources section should not be construed as an endorsement by Partnership for Prevention. This list is intended to be a sampling of known materials and organizations pertinent to worksite health promotion that can be used as a starting point for identifying and gathering other helpful resources. Since the organizations listed may discontinue or revise materials from time to time, all of the items listed may not be readily available. All deletions or corrections should be brought to the attention of:

Partnership for Prevention®
1015 18th Street, NW, Suite 300
Washington, D.C. 20036

Books, Texts, and Reports

How To Design Workplace Health Promotion Programs

By Michael P. O'Donnell, PhD, MBA, MPH

This workbook describes a comprehensive process for designing workplace health promotion programs. Many useful figures and tables are included: best programs for specific health and organizational problems, questions to pose in interviews with top management, sample employee questionnaires, and more.

American Journal of Health Promotion

www.healthpromotionjournal.com/publications/index.htm

Worksite Health Promotion, 2nd Edition

By David H. Chenoweth, PhD

This textbook presents an integrated, step-by-step approach to plan, implement, and evaluate worksite health programs in a variety of settings. Four sections include an overview of the historical development of health promotion, a planning framework to set up and manage a successful program, ideas addressing specific health needs (e.g., mental health, smoking cessation), and information specifically for small and multi-site companies.

Human Kinetics Publishers

www.humankinetics.com

Implementing Wellness Programs in Small Business Settings, Parts 1 & 2

Wellness Council of America

This two-part special report takes small business employers step-by-step through the process and benefits of establishing affordable worksite wellness programs. Part 1 takes a highly detailed look into the first 5 of 10 total steps, while Part 2 covers the remaining five steps.

Wellness Council of America

www.welcoa.org

Partnership for Prevention/U.S. Chamber of Commerce Leading by Example: Leading Practices for Employee Health Management

Partnership for Prevention

Partnership for Prevention's *Leading by Example* CEO-to-CEO initiative is designed to leverage the workplace to improve health by promoting greater business involvement in health promotion and disease prevention. This publication provides the latest research on making the business case for worksite health promotion while featuring leading organizations and their CEOs.

Partnership for Prevention

www.prevent.org

ACSM's Worksite Health Handbook—2nd Ed—A Guide to Building Healthy and Productive Companies

By Nicolaas P. Pronk, PhD

This revised handbook from the American College of Sports Medicine and endorsed by the International Association for Worksite Health Promotion, provides a thorough discussion of program design and implementation—including the application of behavior change theory; new ways of using data to engage participants; the use of technology and social networks to improve program effectiveness; and key features of best-practice programs.

Human Kinetics Publishers

www.humankinetics.com

Evaluating Worksite Health Promotion

By David H. Chenoweth, PhD

This 216-page hardback presents a framework for evaluating and improving worksite health promotion programs. Using 19 case studies for comparison, this book guides readers step-by-step through the evaluation process. Practical and full of how-tos, this book is an excellent resource for students and professionals seeking to conduct comprehensive worksite health evaluations.

Human Kinetics Publishers

www.humankinetics.com

Why Invest? Recommendations for Improving Your Prevention Investment

Partnership For Prevention

A report offering an overview of the results of a national survey determining employer coverage for clinical preventive services, and comparing the results to key findings from Partnership's most recent analysis of services recommended by the U.S. Preventive Services Task Force (USPSTF) and the Advisory Committee on Immunization Practices (ACIP). The report also includes examples from organizations investing in preventive services for their employees and recommendations to employers for increasing the coverage and use of preventive services.

Partnership For Prevention®

www.prevent.org

Investing in Health: Proven Health Promotion Practices for Workplaces

Partnership For Prevention

Provides employers with guidance for establishing health promotion practices in the workplace. These practices improve employee health by controlling tobacco use, promoting cancer screening and early detection, and encouraging physical activity and healthy eating.

Partnership For Prevention®

www.prevent.org

Journals

The American Journal of Health Promotion

Published six times per year, the *American Journal of Health Promotion* covers the "science" and "art" of health promotion through a variety of articles written by industry professional and academics alike. Though primarily aimed towards the research and professional worksite health community, this journal contains valuable information for employers regarding the specific details of worksite health promotion.

www.healthpromotionjournal.com

Journal of Occupational and Environmental Medicine (JOEM)

The official journal of the American College of Occupational and Environmental Medicine. Published monthly, *JOEM* provides peer-reviewed studies in health and productivity management and occupational health and safety.

www.joem.org

Businesses, Organizations, and Associations

AARP

Offers many articles, tips, and resources on a variety of health promotion topics for mid-life adults, including specific tools and programs for keeping active, healthy, and fit. Also includes many other useful links.

www.aarp.org

American Alliance for Health, Physical Education, Recreation and Dance

The AAHPERD is a group of five national associations and several other consortiums which supports healthy and active lifestyles.

www.aahperd.org

American College of Sports Medicine

Many resources geared to employees, family members, and health promotion professionals. Single copies of some brochures are available free of charge by sending a self-addressed, stamped, business-sized envelope. Titles include *Fit Over 40* and *Nutrition and Sports Performance: A guide for physically active young people*. Many downloadable brochures are also available free of charge, and they cover physical activity topics such as the proper use of free weights and resistance bands, as well as many types of fitness equipment.

www.acsm.org

Center for Value-Based Health Management

Provides free information and support in the planning and implementation of value-based health management initiatives as well as benchmarking and program assessment tools.

www.centervbhm.com

Cooper Institute

Founded in 1970 by Kenneth H. Cooper, MD, MPH, the Cooper Institute is involved in preventive medicine research and education. It offers training and certification programs for fitness leaders and health professionals. Also designs and delivers worksite health promotion programs to corporations, school systems, and public safety organizations. Several publications are offered at minimal cost, including *The Walking Handbook*, which instructs readers how to set-up a personal walking program.

www.cooperinst.org

Health Enhancement Research Organization (HERO)

A national coalition of employers interested in employee health enhancement, disease management research, and the association between employee health and productivity.

www.the-hero.org

Institute for Health and Productivity Management (IHPM)

The Institute for Health & Productivity Management is a non-profit corporation created to document and promote the vital relationship of employee health to workplace productivity and, thereby, to corporate performance. The Institute's vision is to make employee health a sound business investment for corporate success. This will create greater value for employers by providing a higher return on dollars spent for health and health care.

www.ihpm.org

International Association for Worksite Health Promotion (IAWHP)

As an Affiliate Society of the American College of Sports Medicine, IAWHP supports practitioners who implement and manage worksite health promotion programs.

www.acsm-iawhp.org

National Business Coalition on Health

Provides expertise, resources, and a voice to nearly 60 employer-led coalitions across the country, collectively representing over 10,000 employers and approximately 34 million employees and their dependents. "Value-based health care"—obtaining the highest quality health care at the most reasonable cost—is a primary focus.

www.nbch.org

National Business Group on Health (NBGH)

A non-profit membership organization of many large national and multinational employers. NBGH works to foster corporate leadership in a variety of health initiatives, including its National Committee on Evidence-Based Benefit Design and its Global Health Benefits Institute.

www.wbgh.org

National Wellness Institute (NWI)

NWI's mission is to serve the professionals and organizations that promote optimal individual and community wellness. NWI offers many worksite wellness materials and sponsors The National Wellness Conference held annually in Stevens Point, WI.

www.nationalwellness.org

CONSUMER BEWARE: USING HEALTH WEB SITES

Millions of people in the United States use the Internet to search for health and medical information. While the Internet provides powerful tools for finding such resources, the Federal Trade Commission (FTC) warns that hundreds make deceptive, unproven, and fraudulent claims.[113] The FTC suggests consumers use the following tips for evaluating any health claim. If it sounds too good to be true, it probably is. Be on the lookout for the typical phrases and marketing techniques fraudulent promoters use to deceive customers.

- The product is advertised as a quick and effective cure-all for a wide range of ailments.
- The text is written in "medicalese"—impressive-sounding terminology to disguise a lack of good science.
- The promoter claims the government, the medical profession, or research scientists have conspired to suppress the product.
- The advertisement includes undocumented case histories claiming amazing results.
- The product is advertised as available from only one source.

Consumer education information is available from the FTC's Web site: www.ftc.gov.

Check out medical products or services offered on the Internet with physicians, pharmacists, and other health care professionals, or use sites that are associated with known, credible medical organizations. Most health plans have Web sites that offer health promotion and other resources such as self-care and nurse lines.

Shape Up America!

Involving a broad-based coalition of industry, medical/health, nutrition, physical fitness, and related groups, Shape Up America! is a national initiative to promote healthy weight and increased physical activity. Its Web site offers handy tools to assess individuals' activity and fitness levels, as well as information about the benefits of exercise and tips to overcome common barriers to increased physical activity.

www.shapeup.org

Wellness Councils of America (WELCOA)

WELCOA offers a step-by-step blueprint to help employers design and implement worksite wellness programs, and also recognizes excellence in worksite health promotion via its prestigious awards program.

www.welcoa.org

Health Promotion Web sites

There are hundreds and hundreds of health promotion Web sites that provide information and resources for employers interested in virtually any area of health management. This is both a boon and a bane, as it can be difficult to separate out the quality sites with credible, scientific information. A good place to start is with official government agencies and nationally-known organizations, such as those listed below.

GOVERNMENTAL WEB SITES

2008 Physical Activity Guidelines For Americans

Provides science-based guidance to help Americans aged 6 and older improve their health through appropriate physical activity. Developed with health professionals and policymakers in mind, the Guidelines provide useful information on the benefits of physical activity, activity recommendations, and injury prevention.

www.health.gov/PAGuidelines/guidelines/default.aspx

CDC's Office on Smoking and Health (OSH)

OSH is the lead federal agency for comprehensive tobacco prevention and control. Web site includes information and statistics on tobacco and smoking, tobacco control and prevention programs; and links for helping quitting.

www.cdc.gov/tobacco

Healthfinder®

A free guide to reliable health information provided by the U.S. Department of Health and Human Services with links to many health-related Web sites

www.healthfinder.gov

Healthy Worksite Initiative

Web site was designed as a resource for worksite health promotion program planners in state and federal government. Planners at non-government workplaces may also find this Web site useful in generating ideas for worksite health promotion in your organization. Here you will find information, resources, and step-by-step toolkits to help you improve the health of your employees.

www.cdc.gov/nccdphp/dnpa/hwi

MedlinePlus

Up-to-date, quality health care information from the world's largest medical library, the National Library of Medicine at the National Institutes of Health. Both health professionals and consumers can depend on it for accurate and current medical information. Access extensive information about specific diseases and conditions, links to consumer health information from the National Institutes of Health, dictionaries, lists of hospitals and physicians, health information in Spanish and other languages, and clinical trials. There is no advertising on this site, nor does MedlinePlus endorse an company or product.

www.medlineplus.gov

National Heart, Lung, and Blood Institute (NHLBI)

Offers publications and tools for patients and the public on a variety of health topics, including asthma, cholesterol, heart disease, high blood pressure, obesity and physical activity, smoking, and many resources on women's health issues.

www.nhlbi.nih.gov/health/pubs/pub_gen.htm

National High Blood Pressure Education Program (NHBPEP)

The NHBPEP's Web site has several new resources to help consumers control their blood pressure, including interactive quizzes, healthy eating tips, and information on other behaviors that contribute to high blood pressure. The NHBPEP is coordinated by the National Heart, Lung, and Blood Institute (NHBLI), part of the National Institutes of Health.

www.nhlbi.nih.gov/about/nhbpep/index.htm

National Institute of Occupational Safety and Health (NIOSH) WorkLife Initiative

The ultimate goal of the WorkLife initiative is to sustain and improve worker health through better work-based programs, policies, and practices. Download topic papers, fact sheets and information on research to practice.

www.cdc.gov/niosh/programs/worklife/

National Center for Chronic Disease Prevention and Health Promotion

Tobacco Information and Prevention Source (TIPS)

Get Surgeon General reports, information on how to quit smoking, and other educational materials. Find out about stop-smoking campaigns and events, search the smoking and health database, and browse many useful related links.

www.cdc.gov/nccdphp

Office on Women's Health (OWH)

In the Department of Health and Human Services, OWH is the champion and focal point for women's health issues and supports culturally sensitive, educational programs that encourage women to take personal responsibility for their own health and wellness. Publishes fact sheets, resource papers, and articles for the scientific and popular press on a variety of issues concerning women's health.

www.womenshealth.gov/owh

PEP—A Personal Empowerment Plan

A Personal Empowerment Plan (PEP) is a strategy for worksites to promote healthy eating and moderate physical activity. The Coordinator's Guide will walk you through the PEP Steps to implementing a wellness program: planning, promoting, implementing, and evaluating respective programs.

www.cdc.gov/nccdphp/dnpa/pep.htm

SAMHSA's Division of Workplace Programs

From the Substance Abuse and Mental Health Services Administration, this Web site gathers many resources for employers interested in reviewing and implementing wellness programs at their worksites. All information is free and special emphasis is placed on alcohol and drug abuse prevention.

www.workplace.samhsa.gov

U.S. Department of Agriculture—Center for Nutrition Policy and Promotion

Site inclues *Dietary Guidelines for Americans*, and resources related healthy eating, including the updated Food Pyramid (*MyPyramid*), Nutrition Insights for healthy eating indices for your employees and their families.

www.cnpp.usda.gov

RESPECTED HEALTH MANAGEMENT WEB SITES

MayoClinic.com

This Web site offers information on scores of diseases, drugs, supplements, and treatment options, as well as services and tools for checking symptoms and handling medical emergencies. A free newsletter subscription is available, as are many educational videos and slide shows.

www.mayoclinic.com

WebMD®

One of the Web's leading health information sites, WebMD offers a wide variety of health and wellness tools, symptom checklists, pharmacological information, current news from the medical industry, and space to store personal medical information online. The message board feature allows for topic-specific discussions with users around the world.

www.webmd.com

Nonprofit Voluntary Health Organizations

Nonprofit voluntary health organizations offer high quality, credible information and resources addressing virtually all of the Healthy Workforce Objectives for employers. Resources range from educational materials that can be distributed to employees, to packaged worksite health promotion programs, to guest speakers. And best of all for small employers, the materials are often free or inexpensive.

For example, the American Heart Association offers free heart and stroke resources, as well as free will and estate planning packets.

Nonprofit health organizations usually have both a national office and local chapters or affiliates. Employers can contact either one for more information.

American Cancer Society

The goal of the American Cancer Society (ACS) is to prevent cancer, save lives, and diminish suffering from cancer. Provides resources including, the most accurate, up-to-date information on cancer; advocacy and public policy; and community programs and services that educate the public about cancer prevention, early detection, treatment, survival, and quality of life.

www.cancer.org

American Diabetes Association

The mission of the American Diabetes Association is to prevent and cure diabetes and to improve the lives of all people affected by diabetes. The Association funds research, publishes scientific findings, provides information and other services to people with diabetes, their families, health professionals and the public on diabetes related topics such as nutrition, fitness, lifestyle and prevention.

www.diabetes.org

American Dietetic Association

ADA provides a wealth of nutrition information for consumers and the media, featuring approximately 5,000 pages of content from news releases and consumer tips to Nutrition Fact Sheets, consumer FAQs and the Good Nutrition Reading List. Also provides a network listing of registered dietitians.

www.eatright.org

American Heart Association

The AHA's mission is: "Building healthier lives, free of cardiovascular diseases and stroke." Web site includes resources such as quizzes, guides, and decision making tools. AHA also sponsors the Start! At Work, a program designed to increase physical activity at work the worksite; and provides coordinator resources for program implementation.

www.americanheart.org

American Institute of Cancer Research (AICR)

AICR provides reliable, accurate, and current information on a variety of subjects related to diet, nutrition, and the prevention and treatment of cancer. This information is available online or through a series of free brochures which are available through its Web site.

www.aicr.org

American Lung Association (ALA)

ALA's Web site contains a vast amount of information regarding smoking cessation, asthma, lung cancer, tobacco-related disease treatment options, national and local programs, and more. Electronic newsletter subscriptions, as well as access to MyLung USA, ALA's personalized portal, are available for free.

www.lungusa.org

Diabetes at Work

Assists employers assess the impact of diabetes in the workplace and provides information and support in the design and implementation of a diabetes management program.

www.diabetesatwork.org

National Council on Alcoholism and Drug Dependence (NCADD)

Founded in 1944 by Marty Mann, the first woman to find long-term sobriety on Alcoholics Anonymous, NCADD provides education, information, help, and hope to the public. It advocates prevention, intervention, and treatment through a nation-wide network of regional offices, from Washington, D.C., to Sacramento.

www.ncadd.org

Appendix I

Healthy People 2010 Objectives Applicable to Worksites[1]*

Component 1: Health Education

Focuses on skill development and lifestyle behavior change in addition to information dissemination and awareness building, preferably tailored to employees interests and needs.

NO. † PHYSICAL ACTIVITY AND/OR FITNESS PROGRAMS OR ACTIVITIES

22-1. Reduce the proportion of adults who engage in no leisure-time physical activity.
Target: 20 percent
Baseline: 40 percent of adults aged 18 years and older engaged in no leisure-time physical activity in 1997 ‡

22-2. Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.
Target: 50 percent
Baseline: 32 percent of adults aged 18 years and older were active for at least 30 minutes 5 or more days per week in 1997 ‡

22-3. Increase the proportion of adults who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
Target: 30 percent
Baseline: 23 percent of adults aged 18 years and older engaged in vigorous physical activity 3 or more days per week for 20 or more minutes per occasion in 1997 ‡

22-4. Increase the proportion of adults who perform physical activities that enhance and maintain muscular strength and endurance.
Target: 30 percent
Baseline: 18 percent of adults aged 18 years and older performed physical activities that enhance and maintain strength and endurance 2 or more days per week in 1997 ‡

22-5. Increase the proportion of adults who perform physical activities that enhance and maintain flexibility.
Target: 43 percent
Baseline: 30 percent of adults aged 18 years and older did stretching exercises in the past 2 weeks in 1998 ‡

NO. † NUTRITION OR CHOLESTEROL EDUCATION

12-13. Reduce the mean total blood cholesterol levels among adults.
Target: 199 mg/dL
Baseline: 206 mg/dL was the mean total blood cholesterol level for adults aged 20 years and older in 1988-94 ‡

12-14. Reduce the proportion of adults with high total blood cholesterol levels.
Target: 17 percent
Baseline: 21 percent of adults aged 20 years and older had total blood cholesterol levels of 240 mg/dL or greater in 1988–94 ‡

19-5. Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.
Target: 75 percent
Baseline: 28 percent of persons aged 2 years and older consumed at least two daily servings of fruit in 1994–96 ‡

19-6. Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or deep yellow vegetables.
Target: 50 percent
Baseline: 3 percent of persons aged 2 years and older consumed at least three daily servings of vegetables,with at least one-third of these servings being dark green or deep yellow vegetables in 1994–96 ‡

19-7. Increase the proportion of persons aged 2 years and older who consume at least six daily servings of grain products, with at least three being whole grains.
Target: 50 percent
Baseline: 7 percent of persons aged 2 years and older consumed at least six daily servings of grain products,with at least three being whole grains in 1994–96 ‡

19-8. Increase the proportion of persons aged 2 years and older who consume less than 10 percent of calories from saturated fat.
Target: 75 percent
Baseline: 36 percent of persons aged 2 years and older consumed less than 10 percent of daily calories from saturated fat in 1994–96 ‡

19-9. Increase the proportion of persons aged 2 years and older who consume no more than 30 percent of calories from fat.
Target: 75 percent
Baseline: 33 percent of persons aged 2 years and older consumed no more than 30 percent of daily calories from fat in 1994–96 ‡

19-10. Increase the proportion of persons aged 2 years and older who consume 2,400 mg or less of sodium daily.
Target: 65 percent
Baseline: 21 percent of persons aged 2 years and older consumed 2,400 mg of sodium or less daily (from foods, dietary supplements, tap water, and salt use at the table) in 1988–94 ‡

19-11. Increase the proportion of persons aged 2 years and older who meet dietary recommendations for calcium.
Target: 74 percent
Baseline: 45 percent of persons aged 2 years and older were at or above approximated mean calcium requirements (based on consideration of calcium from foods, dietary supplements, and antacids) in 1988–94 ‡

* As modified by the *Healthy People 2010 Midcourse Review*.[96]

† The number to the left of the objective is the reference number for the full-text version of *Healthy People 2010*. The number before the dash corresponds to the chapter while the number after the dash matches the objective number. For example—objective 7-5 can be found in Focus Area (Chapter) 7, objective #5 of the *Healthy People 2010*.

‡ (Age adjusted to the year 2000 standard population).

Component 1: Health Education, *continued*

NO. † WEIGHT MANAGEMENT OR COUNSELING

19-1. Increase the proportion of adults who are at a healthy weight.
Target: 60 percent
Baseline: 42 percent of adults aged 20 years and older were at a healthy weight (defined as a BMI equal to or greater than 18.5 and less than 25) in 1988–94 ‡

19-2. Reduce the proportion of adults who are obese.
Target: 15 percent
Baseline: 23 percent of adults aged 20 years and older were identified as obese (defined as a BMI of 30 or more) in 1988–94 ‡

19-16. Increase the proportion of worksites that offer nutrition or weight management classes or counseling.
Target: 84 percent
Baseline: 54 percent of worksites with 50 or more employees offered nutrition or weight management classes or counseling at the worksite or through their health plans in 1998–99

NO. † SMOKING CESSATION CLASSES OR COUNSELING

27-1. Reduce tobacco use by adults.
Target: 12 percent cigarette smoking; 0.4 percent spit tobacco; 1.2 percent cigars
Baseline: 24 percent cigarette smoking; 2.5 percent spit tobacco; 2.4 percent cigars in 1998 ‡

27-5. Increase smoking cessation attempts by adult smokers.
Target: 75 percent
Baseline: 41 percent of adult smokers aged 18 years and older stopped smoking for a day or longer because they were trying to quit in 1997 ‡

27-6. Increase smoking cessation during pregnancy.
Target: 30 percent
Baseline: 14 percent of females aged 18 to 49 years stopped smoking during the first trimester of their pregnancy in 1998 ‡

NO. † BLOOD PRESSURE CLASSES OR COUNSELING

12-10. Increase the proportion of adults with high blood pressure whose blood pressure is under control.
Target: 68 percent
Baseline: 25 percent of adults aged 18 years and older with high blood pressure had it under control in 1988-94 ‡

12-11. Increase the proportion of adults with high blood pressure who are taking action (for example, losing weight, increasing physical activity, and reducing sodium intake) to help control their blood pressure.
Target: 98 percent
Baseline: 84 percent of adults aged 18 years and older with high blood pressure were taking action to control it in 1998 ‡

NO. † STRESS MANAGEMENT CLASSES OR COUNSELING

20-9. Increase the proportion of worksites employing 50 or more persons that provide programs to prevent or reduce employee stress.
Target: 50 percent
Baseline: 37 percent of worksites with 50 or more employees provided worksite stress reduction programs in 1992

NO. † ALCOHOL OR DRUG ABUSE SUPPORT PROGRAMS

26-8. Reduce the cost of lost productivity in the workplace due to alcohol and drug use.
Target: $435 alcohol abuse; $335 drug abuse
Baseline: $68 alcohol abuse; $360 drug abuse

26-10c. Reduce the proportion of adults using any illicit drug during the past 30 days.
Target: 3.2 percent
Baseline: 7.9 percent of adults aged 18 years and older used any illicit drug during the past 30 days in 2002

26-11c. Reduce the proportion of persons engaging in binge drinking of alcoholic beverages.
Target: 13.4 percent
Baseline: 24.3 percent of adults aged 18 years and older engaged in binge drinking in 2002

26-12. Reduce average annual alcohol consumption.
Target: 1.96 gallons
Baseline: 2.14 gallons of ethanol per person aged 14 years and older were consumed in 1996

26-13. Reduce the proportion of adults who exceed guidelines for low-risk drinking.

	1992 Baseline	**2010 Target**
Females	72	50
Males	74	50

NO. † WORKPLACE INJURY PREVENTION PROGRAMS

2-11. Reduce activity limitation due to chronic back conditions.
Target: 25 adults per 1,000 population aged 18 years and older.
Baseline: 32 adults per 1,000 population aged 18 years and older experienced activity limitations due to chronic back conditions in 1997 ‡

15-19. Increase use of safety belts.
Target: 92 percent
Baseline: 69 percent of the total population used safety belts in 1998

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‡ Age adjusted to the year 2000 standard population.

Component 1: Health Education, *continued*

NO. † WORKPLACE INJURY PREVENTION PROGRAMS (CONTINUED)

20-2. Reduce work-related injuries resulting in medical treatment, lost time from work, or restricted work activity. Injuries per 100 full-time workers aged 16 years and older.

		1998 BASELINE	2010 TARGET
20-2a.	All industry	6.2	4.3
20-2b.	Construction	8.7	6.1
20-2c.	Health services (1997)	7.9	5.5
20-2d.	Agriculture, forestry, and fishing	7.6	5.3
20-2e.	Transportation (1997)	7.9	5.5
20-2f.	Mining	4.7	3.3
20-2g.	Manufacturing	8.5	6.0
20-2h.	Adolescent workers	4.9	3.5

20-3. Reduce the rate of injury and illness cases involving days away from work due to overexertion or repetitive motion.
Target: 338 injuries per 100,000 workers
Baseline: 675 injuries per 100,000 full-time workers due to overexertion or repetitive motion in 1997

20-10. Reduce occupational needlestick injuries among hospital-based health care workers.
Target: 269,000 annual needle-stick exposures
Baseline: 384,000 occupational needle-stick exposures to blood among health care workers in 1998

NO. † WORKPLACE VIOLENCE PREVENTION PROGRAMS

20-5. Reduce deaths from work-related homicides.
Target: 0.4 deaths per 100,000 workers
Baseline: 0.5 deaths per 100,000 workers aged 16 years and older were from work-related homicides in 1998

20-6. Reduce work-related assault.
Target: 0.78 assaults per 100 workers
Baseline: 1.10 assaults per 100 workers aged 16 years and older were work-related during 1987–92

NO. † MATERNAL OR PRENATAL PROGRAMS

16-6. Increase the proportion of pregnant women who receive early and adequate prenatal care.
Target: 90 percent
Baseline: 83 percent receive adequate prenatal care in first trimester of pregnancy and 74 percent receive early and adequate care

16-17. Increase abstinence from alcohol, cigarettes, and illicit drugs among pregnant women
Target and Baseline: 2002–03 Baseline/2010 Target

16-17a. Alcohol 90/95
16-17b. Binge Drinking 96/100
16-17c. Cigarette smoking 87/99 (1998)
16-17d. Illicit drugs 96/100

NO. † HIV OR AIDS EDUCATION

13-5. Reduce the number of new cases of HIV/AIDS diagnosed among adolescents and adults. (Developmental)

13-6. Increase the proportion of sexually active persons who use condoms.
Target: 50 percent females; 54 percent males
Baseline: 23 percent of unmarried females aged 18-44 years; 42 percent of unmarried males aged 18-44 years

NO. † CANCER PREVENTION

3-9b. Increase the proportion of adults aged 18 years and older who follow protective measures that may reduce the risk of skin cancer.
Target: 85 percent of adults aged 18 years and older use at least one of the identified protective measures
Baseline: 59 percent of adults aged 18 years and older regularly used at least one protective measure in 1998 (preliminary data) ‡

3-11. Increase the proportion of women who receive a Pap test.
Target: 97% of women 18 years and older who have ever received a Pap test and 90 percent of women aged 18 years and older who received a Pap test within the preceding 3 years
Baseline: 92 percent have ever received a Pap test and 79 percent received a Pap test within the preceding 3 years

NO. † OTHER POSSIBLE HEALTH EDUCATION PROGRAMS

5-2. Prevent diabetes.
Target: 3.8 new cases per 1,000 persons per year.
Baseline: 5.5 new cases of diabetes per 1,000 population aged 18 to 84 years (3-year average) occurred in 1997–1999 ‡

12-2. Increase the proportion of adults aged 20 years and older who are aware of the early warning symptoms and signs of a heart attack and the importance of accessing rapid emergency care by calling 911.
Target: 50 percent
Baseline: 46 percent of adults aged 20 years and older were aware of the early warning symptoms and signs of heart attack and the importance of accessing rapid emergency care by calling 911 in 2001

12-8. Increase the proportion of adults who are aware of the early warning symptoms and signs of a stroke.
Target: 83 percent
Baseline: 78 percent of adults aed 20 years and older were aware of the early warning symptoms and signs of stroke in 2001

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‡ Age adjusted to the year 2000 standard population.

Component 2: Supportive Social and Physical Work Environment

Established norms for healthy behavior and policies that promote health and reduce risk of disease, such as worksite smoking policies, healthy nutrition alternatives in the cafeterias and vending machines, and opportunities for obtaining regular physical activity.

NO. † FORMAL POLICY FOR TOBACCO

27-12. Increase the proportion of persons covered by indoor worksite policies that prohibit smoking.
Target: 100 percent
Baseline: 69 percent of persons were covered by indoor worksite smoking policies that prohibited smoking in 1998-99

NO. † FORMAL POLICY FOR ALCOHOL

26-8. Reduce the cost of lost productivity in the workplace due to alcohol and drug use.
Target: $435 alcohol abuse; $335 drug abuse
Baseline: $68 alcohol abuse; $360 drug abuse

NO. † EMPLOYER-SPONSORED NUTRITION/WEIGHT MANAGEMENT

19-16. Increase the proportion of worksites that offer nutrition or weight management classes or counseling.
Target: 84 percent
Baseline: 54 percent of worksites with 50 or more employees offered nutrition or weight management classes or counseling at the worksite or through their health plans in 1998–99

NO. † EMPLOYER-SPONSORED PHYSICAL ACTIVITY AND FITNESS

22-13. Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs.
Target: 75 percent
Baseline: 46 percent in 1988–99

Each column represents percent of: 1) Worksites, 2) Health Plan, or 3) Worksites or Health Plan

Worksites with fewer than 50 (Developmental)			
Worksites with 50+	36	22	46
Worksites with 50 to 99	24	21	38
Worksites with 100 to 249	31	20	42
Worksites with 250 to 749	44	25	56
Worksites with 750+	61	27	68

NO. † CHANGING THE LANDSCAPE FOR BETTER HEALTH

1-1. Increase the proportion of persons with health insurance.
Target: 100 percent
Baseline: 83 percent of the population was covered by health insurance in 1997 ‡

Component 3: Integration of worksite program Into the organization's structure

The longevity of workplace health promotion programs is related in part to the degree that health promotion is integrated into the organization's structure. Successful worksite health promotion programs are designed to help achieve organizational goals and have the support of top management or the owner(s) of a small business. At a minimum, a dedicated staff, office, and budget should be set aside for health promotion activities. Worksite health promotion must also have well designed programs that attract and retain participants.

Component 4: Related Programs

There are no *Healthy People 2010* objectives that directly address the fourth component of a comprehensive health promotion program. However, over the years worksite health promotion has evolved from, or may be integrated with, other workplace programs. Some common linkages include:

- Employee Assistance Program (EAP)
- Work/family programs
- Occupational health and safety
- Occupational medicine or medical services (medical surveillance programs, executive fitness, etc.)
- Human resources programs (training, productivity improvement programs, performance planning and development, etc.)
- Benefits (growing out of employers concern for rising cost of medical benefits)
- Workers' compensation/disability management programs

† The number to the left of the objective is the reference number for the full-text version of *Healthy People 2010*. The number before the dash corresponds to the chapter while the number after the dash matches the objective number. For example—objective 7-5 can be found in Focus Area (Chapter) 7, objective #5 of the *Healthy People 2010*.

‡ Age adjusted to the year 2000 standard population.

Component 5: Screening Programs

Preferably linked to medical care delivery to assure follow-up and appropriate treatment as necessary and encourage adherence.

NO. † SCREENING PROGRAMS

12-12. Increase the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.
Target: 95 percent
Baseline: 90 percent of adults aged 18 years and older had their blood pressure measured in the past 2 years and could state whether it was high or low in 1998 (preliminary data; age adjusted to the year 2000 standard population) ‡

12-15. Increase the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.
Target: 80 percent
Baseline: 67 percent of adults aged 18 years and older had their blood cholesterol checked within the preceding 5 years in 1998 (preliminary data; age adjusted to the year 2000 standard population) ‡

† The number to the left of the objective is the reference number for the full-text version of *Healthy People 2010*. The number before the dash corresponds to the chapter while the number after the dash matches the objective number. For example—objective 7-5 can be found in Focus Area (Chapter) 7, objective #5 of the *Healthy People 2010*.

‡ Age adjusted to the year 2000 standard population.

Appendix 2

Results of the *2004 National Worksite Health Promotion Survey*[9]

In the United States, the first national worksite health promotion survey was conducted in 1985, and follow-up surveys were conducted in 1992, 1999, and 2004. These surveys serve as national benchmarks and as indicators of change over time. One major worksite health–related goal included in *Healthy People 2010* is to increase to at least 75 percent the number of employers that offer a comprehensive health promotion program for employees. These results were compiled from the data from the most recent *National Worksite Health Promotion Survey* in 2004.

The survey measures included:

- Worksite size (total number of full- and part-time employees)
- Industry type (Standard Industrial Classification code)
- Number of years the worksite had offered a health promotion program (labeled "experience")
- Barriers to offering a health promotion program

From the survey data came these key results:

- The majority of worksites (64.6 percent) employed at least one full- or part-time staff person who was directly responsible for health promotion and worksite wellness
- Approximately 26 percent of worksites reported using incentives to increase employee participation. Incentives involving gifts and discounts were mentioned most often, followed by cash incentives
- Approximately 70 percent of respondents indicated that their health promotion program supported the organization's business strategy
- 67.5 percent believed that the program was integrated into the overall strategy the employer used to address health care
- 66.2 percent reported that it was linked to other key organizational areas
- 49.5 percent of sites used data to guide program direction
- 30.2 percent had a 3- to 5-year strategic plan in place for worksite health promotion

INCORPORATION OF KEY ELEMENTS OF A COMPREHENSIVE PROGRAM, BY WORKSITE SIZE: NATIONAL WORKSITE HEALTH PROMOTION SURVEY, 2004

	Total (n = 730)	50–99 Employees (n = 179)	100–249 Employees (n = 229)	250–749 Employees (n = 211)	≥750 Employees (n = 111)
Health education	26.2	17.8	26.2	38.1	70.3
Supportive social and physical environment	29.9	24.0	32.5	33.5	53.7
Integration	28.6	20.6	33.3	30.9	61.4
Linkage to related programs	41.3	29.6	43.7	59.3	80.5
Worksite screening	23.5	15.8	25.3	30.5	62.4
All five elements	6.9	4.6	6.0	11.3	24.1

Source: Linnan L, Bowling M, Childress J, Lindsay G, Blakey C, Pronk S, Wieker S, Royall P. Results of the 2004 national worksite health promotion survey. *American Journal of Public Health*. 2008;98(8):1503-1509.[9]

- Overall, 19.4 percent of worksites reported using health risk appraisals, and there were statistically significant differences according to worksite size.

One of the objectives of *Healthy People 2010* was for at least 75 percent of worksites to offer a comprehensive health promotion program (see page 15), yet only 6.9 percent of responding worksites met this criterion.

When the five key elements were measured individually, however:

- 41.3 percent of all companies linked their health programming to related programs.
- 29.9 percent offered supportive social and physical environments.
- 28.6 percent integrated their programming into the organizational structure.
- 26.2 percent provided health education.
- 23.5 percent provided worksite screenings.

It was noted that worksites with fewer employees were less likely to offer a comprehensive program in general and were also less likely to offer any one of five key elements (see chart on page 62).

The survey data also highlighted employer participation rates in several key areas.

Health Programming

The most common types of programs offered by all companies were:

- Employee assistance programs (44.7 percent)
- Back injury prevention programs (45 percent)
- Stress management programs (24.9 percent)
- Nutrition programs (22.7 percent)
- Health care consumerism programs (21.6 percent)
- Weight management programs (21.4 percent)

Health Screenings

Overall, the most common types of screening programs were:

- Blood pressure (36.4 percent)
- Alcohol and drug abuse support (35.9 percent)
- Blood cholesterol (29.4 percent)
- Diabetes (27.4 percent)
- Cancer (21.8 percent)

Between 70 percent and 85 percent of worksites with more than 750 employees reported offering all of these services.

Supporting a Culture of Health

With respect to organizations providing environmental supports/policies for physical activity, tobacco/alcohol/drug use, and nutrition:

PHYSICAL ACTIVITY

- 27.6 percent of worksites offered on-site shower facilities.
- 14.6 percent had an on-site fitness facility.
- 13.5 percent offered fitness or walking trails.
- 12.4 percent provided employees fitness breaks during the workday.
- 6.2 percent provided signage to encourage stair use.

TOBACCO/ALCOHOL/DRUG USE POLICIES

- 93.4 percent of employers prohibited the use of drugs.
- 91.1 percent prohibited alcohol.
- 40 percent completely prohibited smoking.

NUTRITION

- 37.4 percent of worksites reported labeling healthy food choices

- 6.1 percent of sites offered catering policies to ensure that healthy food options were available at company events.
- 5.6 percent offered promotions for healthy food choices.

Given that small businesses (those with fewer than 500 employees) represent 99.7 percent of all U.S. employers and employ 50.1 percent of the private-sector workforce, it is apparent that important opportunities to improve the public's health are being missed.

Discussion of Results

Despite relatively stable levels of health promotion programming among sites with more than 750 employees, there was a noticeable decline from 1999 levels in programming among sites with fewer than 750 employees.

One observation that supports a true drop in the number of health promotion programs offered is that worksites in the present survey reported significantly more perceived barriers (on identical questions) to offering health promotion programs than did worksites in the 1999 survey.[114] In our survey, 63.5 percent of worksites reported that lack of employee interest was a barrier to offering health promotion programs, as compared with 49.6 percent of worksites in 1999 (P=.003). Lack of resources was cited as a barrier by 63.4 percent of employers in 2004 and 36.8 percent in 1999 (P=.02); lack of participation by high-risk employees, lack of management support, conflicts with work demands, and lack of access to data were also cited at significantly higher rates.

Conclusion

There is a need for regular monitoring and implementation of evidence-based worksite health promotion and health protection programs. Employers can use information gathered from such programs for benchmarking purposes as they work toward achieving the objectives of *Healthy People 2010.* At a time when health care costs and work demands are rising, it is disturbing that few health promotion programs are available to employees. These results also can be used to create partnerships between employers, employees, health plans, policy makers, and health organizations with the goal of mobilizing workplaces to improve the public's health. Additional research that helps identify or develop effective worksite-based interventions, particularly for small businesses, is essential.

Appendix 3

Worksite Health Promotion: Commonly Used Terms

Demand management: An approach for controlling the demand for health services through a variety of interventions to reduce unnecessary and/or potentially preventable visits to health care providers by decreasing illness and injury in the first place and/or helping people discern whether professional care is necessary. Two major tools for demand management are medical self-care and consumer health education.

Disease (condition) management: Promoting the appropriate and timely use of screening, evaluation, and treatment regimens in the medical management of specific health conditions such as asthma, diabetes, and heart disease.

Direct health care costs: Dollars paid directly for medical services such as outpatient care, hospitalization, pharmacy, and workers' compensation.

Health coaching: A collaboration between the coach and participant with the goal of supporting and facilitating healthy behaviors through the use of behavioral techniques such as motivational interviewing, stages of change, problem solving, and assessing readiness to change.

The Health Insurance Portability and Accountability Act (HIPAA): Rules and regulations that protect the privacy of patient information. HIPAA limits how health plans, pharmacies, hospitals, and employers can use employee/patients' personal health and medical information, including medical records. Organizations are required to establish written policies and procedures to ensure the confidentiality of protected health information.

Health and Productivity Management (HPM): A management approach for improving the health and productivity of a workforce. HPM uses a variety of interventions to help employees change unhealthy behaviors and create a work/corporate culture that promotes health and productivity. In its broadest sense, HPM can include disability management, workers' compensation, health benefits, occupational health services, and other health-related employee programs.

Health Risk Appraisal (HRA): A questionnaire used to assess self-reported risk factors. Often, HRA responses are analyzed to compile lists of modifiable risk factors, along with recommendations for changing them. Also called a "health assessment questionnaire" or "health improvement questionnaire."

Health promotion: The process of enabling people to increase control over, and to improve their health.[18]

Indirect health care costs: The additional cost burden associated with health-related events that affect short- and long-term disability, absenteeism, and presenteeism.

Medical self-care: Activities and interventions that help individuals identify common self-limiting medical problems, apply appropriate home treatments, and determine when professional medical advice and/or treatment is needed. Medical self-care often includes the use of a reference text, health advice line, or health information Web site.

Population Health Management (PHM): A new approach to health promotion and disease prevention that uses an annual HRA to create a health management database that can be used to help plan appropriate health promotion activities for targeted populations (such as an employee group) and evaluate the effectiveness of those interventions over time. PHM typically focuses on changing modifiable risk factors and reducing the number of unnecessary visits to health care providers. It generally employs a "virtual" set of interventions that are not linked to the worksite directly, but reach individuals in their homes (via mail, telephone, or the Internet). It is specifically designed to lower health care costs for defined populations.

Presenteeism: The measurement of on-the-job work impairment. Presenteeism takes into account that a worker

who is physically present may not be fully engaged in work activities because of a health problem or other work/life issues.

Risk factors: Behaviors and conditions that place an individual at increased risk for illness or injury. For example, being female and having a family history of breast cancer are two uncontrollable risk factors for breast cancer. Smoking cigarettes and leading a sedentary lifestyle, on the other hand, are two modifiable risk factors for heart disease.

Value-based benefits design: The planning and administration of employee health benefits based on the specific needs of the organization (and the individual) and the potential value that the benefit offering provides. As such, the total value and total return (e.g., improved clinical outcomes, improved productivity, lower total health-related costs) is weighed against the initial investment of a targeted intervention (e.g., lowering copays for a specific drug class, preventive screenings, immunizations).[115]

Value-Based Health Management (VBHM): "The planning, design, implementation, administration, and evaluation of health management practices that are grounded in evidence-based guidelines across the health care continuum. Within the VBHM model, initiatives primarily focus on practices that demonstrate the greatest total value through value-based benefit design, primary prevention, risk intervention, and chronic disease management."[114]

Virtual wellness: Health promotion programming that does not rely on worksite-based interventions. Information and support are generally provided to individuals in their homes. Virtual wellness typically includes: an annual Health Risk Appraisal (HRA), wellness newsletter sent to the home, health advice line, ability to order self-help materials, a medical self-care text, access to a health management Web site, telephone follow-up with high-risk individuals, and targeted mailings based on selected responses from the HRA. Virtual wellness interventions can be integrated with worksite-based interventions to strengthen their impact on behavior change.

Wellness: "An active process through which people become aware of, and make choices toward, a more successful existence. Wellness is holistic, which encompasses lifestyle, mental, spiritual, and environmental dimensions."[116]

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