SafeWell Practice Guidelines:
An Integrated Approach to Worker Health
Version 1.0

Harvard School of Public Health
Center for Work, Health and Well-being

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Authors

Deborah McLellan, PhD, MHS
Elizabeth Harden, BA
Pia Markkanen, ScD, MSc
Glorian Sorensen, PhD, MPH

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Harvard School of Public Health Center for Work, Health and Well-being
c/o Center for Community-Based Research
Dana-Farber Cancer Institute
450 Brookline Ave., LW715
Boston, MA 02215
Phone 617-582-7827
http://centerforworkhealth.sph.harvard.edu/

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Introduction

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Purpose of the SafeWell Guidelines

The purpose of the SafeWell Practice Guidelines (SafeWell Guidelines) is to provide a model and resources for comprehensive approaches to worker health that integrate and coordinate efforts to promote healthy behaviors, ensure a safe and healthy work environment, and provide resources for balancing work and life. The goal is that the Guidelines will provide organizations with a framework for implementing a comprehensive worker health program, along with specific strategies pertaining to the details of implementation. This includes descriptions of organizational processes, selected concrete tools, and links to other existing tools and resources to build, implement, and evaluate a comprehensive health program at your worksite.

The SafeWell Guidelines were created in response to feedback from multiple sources: academicians engaged in occupational safety and health and workplace health promotion research, and worksite partners directly engaged in and responsible for workplace health initiatives. These stakeholders noted a gap in current resources for a descriptive framework and for specific strategies for businesses attempting to implement comprehensive and integrated workplace health programs. The SafeWell Guidelines are different from other toolkits focused on workplace health in that they present an integrated and comprehensive approach throughout all aspects of program planning, implementation, and evaluation.

SafeWell Practice Guidelines, Version 1.0: A special focus on health care

Although the overarching framework and many of the more specific strategies outlined in these guidelines could be applied to a variety of industries, the SafeWell Guidelines have been written specifically for large, well-resourced health care organizations.

Within the health care industry, the need and rationale for workplace health programs that are comprehensive and grounded in a culture of health is pronounced. Health care workers represent an aging population that is being increasingly affected by chronic health conditions. Planning and implementation of effective workplace health programs have much potential in retaining existing health care workers, and as current workers move out of the workforce, also improving recruitment of qualified staff. Workforce retention is one of the most important goals for a healthcare employer. Shortages of clinicians are widely documented both in the United States and other parts in the world. In the United States, literature shows that the turnover of newly hired nurse graduates is anywhere between 13-70% during their first year.[1] Studies show that the reasons newly hired nurses leave are rooted in psychosocial aspects of work: heavy workloads, time pressures, necessary non-nursing duties, and low value placed on their contributions to assigned units.[1-3]

In addition to the effects of policies and environmental standards on any workplace and workforce (e.g., availability of comprehensive benefits; access to nutritious foods, smoking cessation supports, and physical activity options; support for work-life issues; etc.), the health care setting has unique, industry-specific challenges and risk factors (e.g., the presence of shift work and extended overtime, and patient handling and transfer practices that pose back injury and other musculoskeletal disorder risks).

However, the industry also holds significant strengths for implanting comprehensive workplace health programs. The industry itself is rooted in health promotion and disease prevention ideals, and health care employees are likely to be knowledgeable about health promotion practices.

The Guidelines speak to these unique attributes and challenges in the health care industry. Many of the examples that are included throughout are specific to the health care industry, as are many of the particular challenges, suggestions, and tools.

Creation of the SafeWell Practice Guidelines

The SafeWell Practice Guidelines were created through a collaboration between the Harvard School of Public Health Center for Work, Health, and Well-being (CWHW) and Dartmouth-Hitchcock Health Care (D-H) in Lebanon, NH. At the same time that the SafeWell guidelines were being developed, D-H was implementing an integrated program called Live Well/Work Well (LWWW) in its Lebanon, NH site as well as planning to implement such programs in some of its sites in the Community Group Practices based in southern New Hampshire. Based on its experience, D-H provided "real-world" input on how implementation of the SafeWell guidelines might work. D-H

also helped to feed examples from practice to enrich the development of and examples in these guidelines.

The SafeWell Vision

New vision needed for workplace health

As today's employers and workers are faced with ever-changing demands, there is a need for a new vision for the healthy worksite and for healthy workers. This new vision reflects that the health and safety of workers and workplaces are closely intertwined, and that effective workplace health programs address both areas. This approach has sometimes been termed as one that creates and sustains a *culture of health* in which employee health and well-being and organizational success are inextricably linked, and both the organization and individual employees support this culture. In settings where a strong culture of health exists, a dynamic interplay exists between employees' personal values, organizational values, and business performance. Employees are provided with opportunities and resources to engage in wellness behaviors and risk reduction, while at the same time, organizational leadership, benefits, policies, incentives, programs, and environmental supports are coordinated in order to support active engagement in and sustainability of safe workplaces and healthy lifestyles.[4]

The old approach: Separate silos

Traditionally, Occupational Safety and Health Programs (OSH), Worksite Health Promotion (WHP), and employee benefits and other supports (HR) have operated separately, even though they all promote worker health and well-being.

OSH programs are designed to prevent work-related injuries and illnesses by minimizing workers' exposures to job-related risks, including musculoskeletal disorders and exposures to safety, physical, biological, chemical, and psychosocial hazards. It emphasizes hazard prevention and control, following the concept of "hierarchy of controls" (also increasingly called "hierarchy of prevention" among OSH practitioners) that prioritizes the importance of hazard elimination through prevention, over merely controlling exposures. Participation in these programs is often seen as the responsibility of management.

WHP programs aim to promote healthy behaviors such as not using tobacco, keeping weight under control, eating a healthy diet, obtaining appropriate levels of physical activity, using seat belts, acquiring appropriate vaccinations, adhering to screening guidelines, and preventing substance abuse. Participation in these programs is often seen as the responsibility of individual employees.

HR programs somewhat overlap between OSH and WHP. In response to OSH psychosocial issues, HR may develop organizational policies supporting flexible work hours, or stress-reduction programs. HR may be involved in instituting bans on tobacco

use at the workplace to reduce consumption of and exposure to tobacco, and providing subsidized gym memberships for employees to support increased physical activity.

While it is common practice in many worksites to address health promotion, occupational safety and health, and human resources and employee benefits as distinct silos, there is increasing evidence that coordinating and integrating them leads to healthier workers and workplaces.[5-7]

The New Approach--Integrating Workplace Health

Coordinated and comprehensive approaches that include programs and policies that address the physical and organizational work environment and promote personal health among individual employees and their families may be more effective than using either workplace health promotion or occupational safety and health alone.[4, 5, 7]

Integrated approaches to workplace health have been shown to:

- Improve health behaviors including smoking cessation[4, 5, 8, 9], dietary improvements[4, 5, 10-13], and increased physical activity[9, 14-20]
- Improve employee participation in occupational safety and health (OSH) and health promotion programs. There is evidence that when workers are aware of OSH changes made at the worksite, they are more likely to participate in smoking cessation and healthy eating activities, and are more likely to participate in OSH strategies as well.[4, 5, 21-25]
- Reduce occupational injury rates. Good physical condition, absence of chronic disease, and good mental health are associated with low occupational injury rates.[5, 26-29] Workers with adverse health risk factors such as obesity, sleep deprivation, poorly controlled diabetes, smoking, and drug and alcohol abuse are shown to be more likely to sustain injuries.[5, 29, 30]
- Reduce health care costs, administrative costs, and costs resulting from lost productivity or increases in work absenteeism.[5, 7, 9, 31-45]

The integrated approach to workplace health programs fuses together and coordinates programs, policies, and practices of OSH, WHP, and HR, and employs multiple levels of intervention--environmental, organizational, and individual. This model addresses environmental exposures on the job, the social context of work, and workers' individual health behaviors through linking and coordinating policies and practices across these different areas. Integrated programs emphasize that workplace health programs are the responsibility of both organizational management and individual employees.

The way to integration

Merely stating that using an integrated approach improves worker and workplace health is not enough to change the status quo. Developing, executing, and sustaining comprehensive workplace health programs requires thoughtful and creative leadership, effective assessment and evaluation tools, and innovative implementation strategies.

The SafeWell Guidelines provide a theoretical framework as well as concrete tools and strategies to support and guide this work.

> **The SafeWell Vision: Effective workplace health programs implement programs, policies, practices, and benefits designed to promote health among individual workers in healthy, safe, and productive workplaces.**

Why is workplace health important?

Approximately 50% of Americans report living with at least one chronic disease.[46] Many of these chronic diseases are related to smoking, physical inactivity, and unhealthy diets. But worksites also have characteristics that may contribute to chronic diseases. Thus, chronic and acute diseases and injuries significantly impact workplaces and workers. At the same time, the workplace offers an important venue both to decrease morbidity and mortality that are directly linked to work activities, work environment, and work organization, as well as to support health promotion policies and activities inside and outside of work.

1. Workplace risk factors are related to injuries and illnesses

In 2009, more than 4,500 fatal and over 1.2 million nonfatal work-related injuries and illnesses were reported in private industry workplaces; just over half of the non-fatal injuries resulted in time away from work due to recuperation, job transfer, or job restriction.[47, 48] Musculoskeletal disorders constitute about 28% of all nonfatal work-related injuries.[49] Some workplace risk factors for musculoskeletal disorders include repetitive motions, forceful exertions, awkward postures, vibrations, and temperature extremes. Additionally, the workplace has risk factors for cardiovascular disease, including exposure to chemicals in tobacco smoke; organizational factors such as work schedules (e.g., long work hours and shift work); and psychosocial stressors such as high demand-low control work, high efforts on the job combined with low rewards, and organizational injustice. [50, 51] Such work schedule factors and psychosocial stressors also contribute to mental health disorders,[50] and lifestyle risk factors such as smoking, alcohol misuse, obesity, and lack of exercise.[52-54] Estimates of the proportion of cardiovascular disease attributable to workplace factors range from 15% [55] to 35%.[56]

2. Many individual risk factors are modifiable at the worksite

Modifiable individual risk factors are largely responsible for upward trends in chronic diseases and corresponding mortality trends in the United States. Data from 2005 showed tobacco use and high blood pressure to be responsible for approximately one in five and one in six deaths in the United States respectively[57], and overweight-obesity, lack of physical activity, and high blood glucose to each be responsible for nearly one in 10 deaths[57]. Workplace health programs present a unique opportunity to intervene in these behavioral risk factors and, in turn, to have an impact on the prevalence and

severity of chronic diseases. As the US workforce ages and is increasingly at risk for chronic conditions, such intervention opportunities become increasingly important.

3. The health of workers is tied to the health of organizations

An unhealthy workforce cannot sustain basic business activities, let alone participate in and contribute to the types of strategic growth, quality improvement, and innovative programming that is required of today's businesses to succeed in the face of increasing demands and competitive markets.

In addition to growing evidence that cites the direct cost savings of workplace health programs to health premiums and other employer-covered health care costs[44], increasingly an emphasis is also being placed on how integrated workplace health and safety programs can support savings in indirect and productivity-related costs. This latter area in particular focuses on the broader value of integrated workplace health and safety programming to support employees as valuable human capital and critical resources to organizational success. This shift in focus emphasizes the longer term and, in some cases, less quantifiable gains of integrated workplace health programs. The information below provides evidence on both the financial gains and other value gains that may be achieved through the development and implementation of the SafeWell approach to integrated workplace wellness, and may be helpful in building a business case to support use of the guidelines.

Healthcare spending and injury costs in US worksites are high. In 2009, U.S. healthcare spending reached 2.5 trillion dollars. This represents 17.6% of the nation's Gross Domestic Product, up from 16.6% in 2008. [58] According to the 2010 Liberty Mutual Workplace Safety Index, occupational injuries and illnesses in 2008 amounted to over $53 billion in direct workers' compensation costs.[59] The top five injury causes (overexertion, fall on same level, bodily reaction, struck by object, and fall to lower level) accounted for 71% of this cost burden. Overexertion (i.e., injuries related to lifting, pushing, pulling, holding, carrying, or throwing) has maintained its top rank for years. According to Liberty Mutual, overexertion accounts for $13.40 billion in direct costs– more than a quarter of the overall national burden.[59] In the healthcare industry, inflation-adjusted direct and indirect costs associated with back injuries are estimated to be $7.4 billion annually, in 2008 dollars.[60, 61]

Workplace health programs have been found to reduce health care costs. A meta-analysis of the literature on costs and savings associated with worksite health promotion programs reported that medical cost reductions of about $3.27 are observed for every dollar invested in these programs.[31] A critical review of 16 studies published during 2004-2008 reported favorable clinical and cost outcomes of comprehensive health promotion and disease management programs.[32, 43] A recent evaluation of Johnson & Johnson's worksite health programs from 2002 to 2008 found that the company had experienced average annual growth in total medical spending that was 3.7 percentage points lower compared to similar large companies.[62] As healthcare costs

continue to rise and the majority of Americans continue to obtain health care coverage through employer-sponsored programs, these findings demonstrate direct cost-saving opportunities for employers.

A healthier workforce is more efficient and more productive. Research has shown that healthier workers are less likely to be injured or absent from work, and that absenteeism costs fell by $2.73 to every dollar spent on workplace wellness programming. In addition, job performance has been shown to be better among healthy workers, and the phenomenon of presenteeism (wherein workers are present but exhibit diminished performance) to be significantly reduced. [31, 36, 63] Such engagement has positive implications for business productivity, profitability, and organizational culture. These findings are particularly powerful when one considers that indirect costs such as absenteeism and presenteeism are considerable and have been found to be up to three times as large as direct medical costs for some companies. [64]

It is important to keep the aging workforce healthy. It is estimated that between 2006 and 2016, the number of workers 55 to 64 years of age will increase by 36.5%, and workers aged 65 and 74 years of age and 75 and older will increase by 80%.[5, 65] Older workers typically suffer from chronic health conditions and have multiple health risks. The conditions of older age groups require more care and are more difficult and costly to treat than the chronic conditions that are more common in younger age groups. In one analysis,[66] a company's 2003 annual aggregate medical claims costs for employees and their dependents rose according to age: employees aged 25 to 29 had an aggregate cost of about $2,148, for those aged 40 to 44 years the cost rose to $4,130, and for those between the ages of 60 and 64 the aggregate cost was to $7,622.[5, 66] The figures highlight the importance of keeping all workers, and especially older workers, healthy and managing chronic illnesses that do exist so that they do not worsen over time.

A healthy workplace contributes to a positive image for the organization. The World Health Organization's (WHO) Regional Guidelines for the Development of Healthy Workplaces defines a healthy workplace as one that tries to create a safe and healthy work environment, makes worksite health promotion and occupational safety and health part of management practices, supports work styles and lifestyles conducive to health, ensures total organizational participation, and offers positive supports to the surrounding community and environment.[7, 67] WHO maintains that such coordinated efforts can contribute to a positive image for the organization having a healthy workplace.

Health Care Reform may offer incentives for workplace health programs. Provisions under the Patient Protection and Affordable Care Act [68] have created incentives for employers to provide employee health care coverage and made technical assistance and support available to promote workplace health programs.[69] This is likely to result in increased interest in comprehensive worksite health programs as a means of reducing health and business costs.

Health at work, home, and community are already interconnected—integrated workplace health programs make sense. Work impacts health, and health impacts work. Hazardous exposures at work, including stressful working environments, can impact the health of workers as well as the physical environments in which organizations are situated. Employees who are suffering from a chronic disease, injury, or work-life imbalances may not be able to perform to their best abilities.

At the same time, organizations and communities that have programs and policies that support worker health (e.g. safe walking trails, smoking bans, healthy food choices, flexible work hours,) can contribute to improving the health of the worker, organization, and community. Hymel et al. [5] have suggested that this "three-legged stool" of workplace, home, and community include the workplace as part of the medical team in monitoring and improving worker health. The authors argue that integrated workplace health promotion and protection is a vital component to this effort.

World-class organizations are transitioning to integrated systems already. Johnson and Johnson has been supporting an integrated system for worker health since the late 1970s. Goetzel describes a number of other world-class organizations that have also instituted integrated health, safety, and productivity management programs.[44] These include such diverse organizations as Caterpillar, CIGNA Corporation, Daimler-Chrysler/United Auto Workers, Union Pacific Railroad, and Citibank. The National Aeronautics and Space Administration is also implementing an integrated program for worker health.[6]

SafeWell Integrated Management System for Worker Health: Framework of areas, levels of engagement and organizational functions

Figure 1 represents the SafeWell Integrated Management System (SIMS) for Worker Health. It is designed after other recognized management systems, including the American management systems standard in occupational safety and health (i.e., ANSI Z10)[70] used in companies (e.g., IBM),[6] and a healthy workplace model offered by the World Health Organization[71].

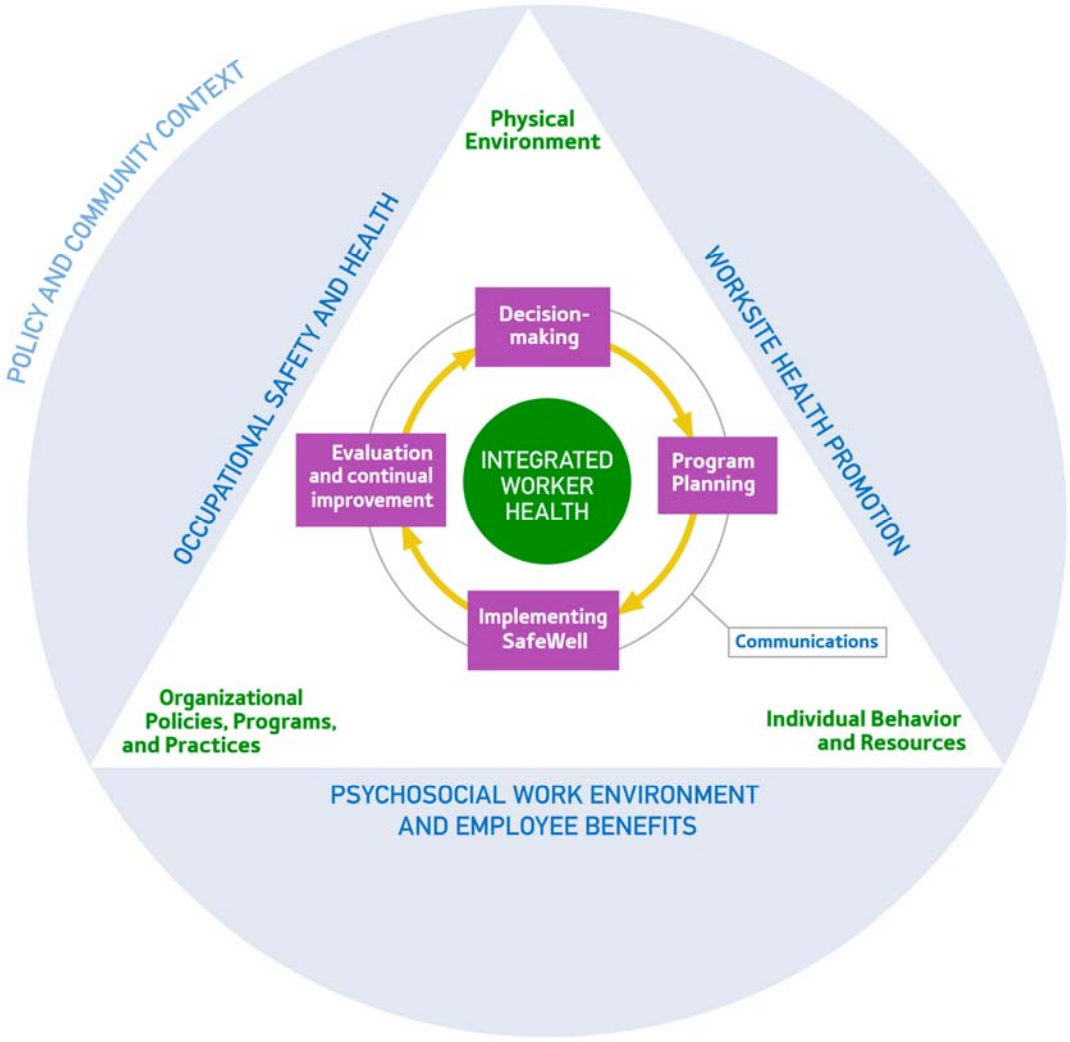

Figure 1—The SafeWell Integrated Management System for Worker Health

Starting with the outside circle, it is important to note that SIMS is situated within a larger policy and social context. Decisions that are made within worksites often are influenced by regulatory and legislative efforts, economic conditions, and the image the

organization wants to portray in the community. While these may seem to be macro-level issues, they can impact individual health in many ways. For instance, is there access to safe, affordable recreational activities in the neighborhood? Are healthy food options available? Does the state have comprehensive and affordable health insurance programs for its inhabitants that organizations offer to their employees?

The main emphasis of these guidelines, however, is on the components inside the circle, and they represent the SIMS approach to worker health. On the three sides of the triangle, rest the three major disciplinary areas to integrate for worker health: occupational safety and health (OSH), worksite health promotion (WHP), and the psychosocial work environment and employee benefits (HR). Within the three corners of the triangle are the three levels of engagement for SafeWell: the physical environment; organizational policies, programs, and practices; and individual behavior and resources. The main organizational functions that drive the SIMS are represented by the boxes within the triangle in Figure 1 and are further defined in "Chapter 1: Implementation." The functions include: decision-making, program planning, implementation of SafeWell, and evaluation and continual improvement. Chapters of the Guidelines are organized around these topics. Communications is an additional important component of each of the aforementioned functions, so it is represented as an additional box linking to each of the other boxes just described.

The circle in the middle of Figure 1 is the ultimate goal of SIMS—to achieve and maintain integrated worker health.

While Figure 1 represents a rendition of an optimal integrated management system for worker and workplace health and well-being, not all organizations will have every component integrated. The important principles to consider are:

- A systems-level approach that coordinates programs, policies, and practices
- Coordination of occupational health and safety, worksite health promotion, and human resources
- Programs, policies, and practices that address the work environment/organization and worker health and well-being

What is included in the Guidelines?

The SafeWell Guidelines are laid out in the four chapters described below. Each chapter speaks to a different part of the process of implementing and sustaining a comprehensive approach to workplace health programs.

Chapter 1. Providing the foundation: Organizational leadership and commitment: Recommendations are made for engaging top management and creating a culture of health, integrating workplace health programs, and engaging mid-level management and employees in these efforts, all through the SafeWell Integrated Management System (SIMS).

Chapter 2: Program planning: How to inform the program planning process including a worksite analysis, incorporate broad-based input from all organizational levels, and design plans for programming.

Chapter 3: Implementation: What is meant by an integrated program; what it looks like; the steps of the implementation process; and some implementation examples.

Chapter 4: Evaluation and continual improvement: How to define evaluation goals, incorporate evaluation strategies into program planning and execution, and integrate evaluation results into quality improvement strategies. A real-world case from Dartmouth Hitchcock Medical Center in Lebanon, NH is provided to exemplify how one organization is implementing the SafeWell approach using the organizational functions of decision-making, program planning, implementation, and evaluation for continual improvement toward total worker health.

How to use the Guidelines

Read together, these chapters follow a chronological order and for some employers it may make sense to read and implement strategies in that order. However, the Guidelines have also been developed so that each chapter may be read independently from the others. Depending on an organization's needs and the type and level of health programming already in place, it may make sense to focus on particular chapters (and/or particular elements within chapters). At a minimum, the SafeWell approach requires that OSH, WHP, and HR be addressed comprehensively and at multiple levels.

Individual organizations and worksites vary considerably in their needs, capacity, and experience with employer health programming. Strategies that work well for one organization may not be a fit for others. The SafeWell Guidelines recognize this variability and have been developed to fit with a range of organizational experiences and requirements. This information is not intended to dictate a single, correct approach that should be adopted by all employers, and as such, each chapter in these Guidelines provides a variety of suggestions for how these components of an integrated framework may be implemented. The Guidelines are intended to provide health care organizations with a broad framework for implementing comprehensive health programs and, within this, a menu of options for how the components of this framework may be executed.

Throughout the SafeWell Guidelines, examples and experiences from the field are provided to illustrate the broader framework, strategies, and information through helpful examples. These examples are drawn from experiences at Dartmouth-Hitchcock Health Care, Partners HealthCare, and other partner organizations. Three types of field experiences are included:

Notes from the field provide specific examples of how comprehensive approaches have been implemented in health care settings.

Tools from the field give concrete tools and resources that organizations have used in their implementation of workplace health programming.

Challenges and tips from the field highlight issues that may arise when implementing the SafeWell guidelines and how other organizations have overcome these.

Who should use the Guidelines?

The SafeWell Guidelines are intended for management of health care organizations who are directly engaged in and responsible for employee health, safety, and wellness. This may include directors and/or managers of occupational health, human resources, individual medical units, or other departments. While written for this audience, the principles described in the guidelines have been used in manufacturing and service-oriented sectors too.

Cost savings of implementing the SafeWell Guidelines

The cost of implementation will depend on the size of the worksite as well as on the comprehensiveness of the integrated program--for example, whether to include employee dependents in its programming. Goetzel et al. analyzed data from 43 worksites consisting of approximately about one million employees. They found that the 1998 median health and productivity management costs these organizations paid equaled $9,992 per employee.[72] These costs included such elements as group health, turnover, unscheduled absence, non-occupational disability, and workers' compensation costs. When expenses related to employee assistance, health promotion, occupational medicine, safety, and work/life services also were added into the equation, the combined total cost per employee reached $10,365. With costs of $9,992 per employee, the researchers determined that the cost savings for implementing a comprehensive program could be about $2,562 per employee per year, a savings of about 26%.[72]

Additional resources

The resources included below provide additional information and details to support the development and implementation of integrated workplace health programs. Readers may find these helpful in garnering the support of business leaders and strengthening the rationale for developing new workplace health programs and/or enhance existing health services within their particular organization, though none are truly as integrated as the SafeWell approach.

Total Worker Health
NIOSH's website for its Total Worker Health initiative has many resources, toolkits, and calculators for worker health.
http://www.cdc.gov/niosh/twh/resources.html

Leading by Example
The Leading by Example initiative is a peer-to-peer communication campaign for CEOs on the efficacy of worksite health promotion. The publications have useful talking points

and tools for CEOs.
http://www.prevent.org/Initiatives/Leading-by-Example.aspx

Health and Productivity Management
This knowledge center supported by the American College of Occupational and Environmental Medicine contains information for businesses about the costs, benefits, and importance of addressing worker health and worksite safety.
http://www.acoem.org/Page3Column.aspx?PageID=7351&id=1350

Making the Business Case for Safety and Health
This OSHA website provides various information sources to illustrate why investing on safety and health is beneficial to the organization's financial performance.
http://www.osha.gov/dcsp/products/topics/businesscase/index.html

Estimated Costs of Occupational Injuries and Illnesses and Estimated Impact on a Company's Profitability Worksheet – As part of OSHA's $afety Pays Program, businesses can use this cite to estimate the direct and indirect costs of occupational injuries.
http://www.osha.gov/dcsp/smallbusiness/safetypays/estimator.html

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Chapter 1: Providing the foundation: Organizational leadership and commitment and employee participation

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Chapter overview

There is growing evidence and interest in the employer community that the growth and sustainability of organizations are linked intimately to employee health and well-being.[1] The Institute of Medicine describes four key attributes of healthy individuals and organizations:

1. Healthy: Good health behaviors, few risk factors, minimal diseases and injuries
2. Productive: Working to maximize contributions to personal and organizational goals and mission
3. Ready: Able to respond to changing demands
4. Resilient: Adjusting to demands, setbacks, or challenges by rebounding quickly and without undue suffering[2]

This chapter will outline the foundation for building a healthy, productive, ready, and resilient workforce and workplace. It begins by identifying major strategies related to organizational leadership and commitment. These strategies include:

- Articulating the vision
- Instilling a "culture of health"
- Demonstrating leadership
- Integrating programs
- Engaging mid-level management
- Establishing the SafeWell Integrated Management System

This chapter will outline in detail suggestions for implementing the SafeWell Integrated Management System (SIMS), as the SIMS incorporates the above bulleted strategies and is the cornerstone for implementing policies, programs, and practices to make employees and the workplace safe and healthy. The chapter concludes with a section on employee engagement.

Organizational leadership and commitment to the SafeWell approach

Top management is responsible for articulating the vision for worker and worksite health and commandeering the human and fiscal resources for implementing the SafeWell approach at the worksite. Engaging all managers and employees will increase participation in the SafeWell approach and activities, and improve the chance for success.

Articulate the vision

Creating and sustaining a healthy workplace begins with a clearly articulated and communicated vision from senior leadership that ties health to an organization's mission. It values worker health and well-being as key components of obtaining organizational success and may be included as a core component of the organization's mission. To maximize success and impact, this vision needs to apply consistently to the entire workforce. Through presentations, memos, the intranet, and other communication vehicles, leadership can stress the linkages between health, and worker and organizational well-being. Policies, programs, and practices that exist and are planned can be highlighted by senior leadership as well.

The example below provides an example of how senior management in one health care setting articulated its vision for worksite and worker health.

Notes from the field

Dartmouth-Hitchcock Health Care (D-H) in New Hampshire developed vision and mission statements for its Live Well/Work Well program, which integrates health programming into overall organizational goals.

"Vision: Achieve the healthiest workforce possible as measured by health risk status, functional health status, condition-specific disease burden, employee and patient experience with health care and health care costs.

Mission: Create an engaging culture of health, safety, and well-being, which will lead the transformation of health care in our region and set the standard for the nation. This transformation

will be accompanied by a reduction in total health care costs and health related improvement in performance and value." [3]

Instill a "culture of health"

Two main factors in obtaining a healthy workplace have been described as the performance of the organization and the health of the workers.[4] Included in this definition of organizational health are the structural and organizational characteristics of the organization such as job demands, work schedules, interpersonal relationships, and management style; and organizational practices and policies. [4] Also, both the organization and the employee are responsible for contributing to organizational performance and a healthy workplace and workforce. SafeWell adds to this description the importance of having a safe and healthy work environment. This means eliminating and/or minimizing risks and hazards from the physical and psychosocial work environments.

In Chapters 2 and 3 of these Guidelines, guidance is provided to help organizations set goals for obtaining and maintaining a safe and healthy workplace and workforce. One of these goals might be to instill a culture of health. Understandably, this is a process, and organizations may be at different points along the path towards health. The structure outlined below in the SafeWell Integrated Management System can provide a framework for an organization to work towards a culture of health. It is recommended that all levels of employees become involved in the planning and implementation of the program, so the best chance of high employee participation and desirable programming may be obtained. Remember that there is shared responsibility for a safe and healthy workforce and workplace; management and employees both need to be involved for best results.

Tools from the field

The Partnership for Prevention's Leading by Example initiative (by CEOs for CEOs) has outlined a number of ways to provide an environment supportive of building a culture of health.[1] Adapting these to the SafeWell approach, they include:

1) State that health is an important value and objective for the organization, and describe necessary steps management will take to make the worksite safer and healthier

2) Hold all managers accountable and reward them for creating a safe and healthy workplace

3) Ensure that supervisors know their responsibility in creating a healthy and safe environment and provide them with training

4) Create peer support teams for employee safety, health and well-being

5) Instill an environment to facilitate health such as fitness options, showers, bike racks, walking paths, healthy food options, and quiet break rooms

6) Implement occupational safety and health (OSH) policies (e.g. safe patient handling, ergonomics, infection prevention, mandatory break policies), as well as ones to support healthy choices (e.g. tobacco and other substance use bans, healthy food offerings at meetings)

7) Provide work time for worker participation in OSH and health programs

8) Offer and communicate about benefits to encourage a culture of health (e.g., flex-time, wellness opportunities, screening and prevention coverage, health coaching)

9) Communicate about activities at all phases

Demonstrate leadership

Words and statements by the CEO are important, but not enough alone to instill a culture of health. Talking the talk without walking the walk will ring hollow with many employees. While there will need to be leaders and champions at all levels to help ensure the program's success, it is important for employees to see that management is serious about its commitment to their health and well-being. Research has shown that employees may be more likely to change their own behaviors if they see that management is serious about making its own contribution to workplace safety and health.[5]

Leadership support can be communicated in many ways:

- Senior leadership expresses its commitment to a culture of health and allocates resources to attain it
- Worker and workplace health are included as part of the organization's mission and values
- Management shows its commitment by investing in workplace safety and health, providing health-promoting, safe work environments and facilities, and offering flexible work hours and employee benefits to support health
- Supervisors are accountable for worker and workplace health—e.g., improvement in workplace health may be driven by linking departmental survey results and performance to management incentives and performance

- Management practices and models healthy and safe behaviors such as adhering to safety and health practices, maintaining a healthy weight, joining physical activity events, and drinking non-alcoholic beverages at company events.[6]

Integrate programs

At its very core, the SafeWell approach to worker health is a systems-driven approach that encourages organizations to coordinate and integrate programs and structures that influence worker health. This includes coordinating and integrating programs related to occupational safety and health (OSH), worksite health promotion (WHP), benefits design, behavioral health, absence management, disease management, and others. This topic will be discussed in more detail in the explanation of the SafeWell Integrated Management System below and throughout the Guidelines.

Engage mid-level management

Supervisors and managers at all levels should be involved in planning and implementing SafeWell. Even if senior leadership supports SafeWell and includes it as a business objective, steps need to be taken to assure that mid-level managers also support the program. Mid-level management and supervisors convey information between employees and upper management. They often hold the keys to program success in how they respond to planning and implementation efforts. If they are supportive in how they discuss the program and whether they encourage their employees to participate, the program has a better chance of being successful. On the other hand, if they are resistant to employee participation or scoff at the program's intent, barriers to success may arise. Communicating with and involving mid-level management is important before beginning any worksite health program. All levels of management need to show their commitment to the SafeWell approach.

Lessons learned from the field

Middle management support is critical to successful programs, policies, and practices. A manager responsible for implementing health programs at Dartmouth-Hitchcock says that it is important to have "walk-around" leadership support, as opposed to "conference room" support—meaning that it is easy to have leadership say in a conference room that they will support a policy, program, or practice. The manager's experience was that if leaders did not follow through with their support back on the floor or in the office (e.g., by giving employees work time to complete a survey or encouraging employees to become involved in activities), participation numbers were lower. Furthermore, a paper on the Dartmouth-Hitchcock effort reports that perceived

supervisor support and caring of employees correlates with increased participation in health assessments.[7]

Health Partners, a Minnesota-based health care plan, conducts daily/weekly "huddles" with all departmental staff that include messages that leadership wants to convey to middle managers as well as to front line employees.

Establish a SafeWell Integrated Management System (SIMS)

An integrated management system is one that integrates all policies, programs, and practices into one overarching framework that coordinates activities instead of breaking them down into competing "silos." Such management systems have been around for about 40 years, especially as part of Total Quality Management and for Occupational Safety and Health (OSH).[2, 8]

What sets these practice guidelines apart from other worksite health programs and integrated management systems is their emphasis on using a SafeWell Integrated Management System (SIMS) for worker health that includes employee engagement**.** The SIMS approach integrates individual and organizational policies, programs, and practices for employee health and well-being with the OSH management systems. The National Institute for Occupational Safety and Health (NIOSH) and the Institute Of Medicine (IOM) recognize that integrated systems such as SIMS perform more effectively than segregated ones, capitalizing on the linkages and synergies inherent in integrated systems.[2, 9] Leadership commitment to establishing a SIMS at the workplace denotes an important step in attaining a safe, healthy, productive, ready, and resilient organization.

While theoretically integrated systems sound like, and are, a good idea, how does an organization actually implement them? The next section lays out some parameters for this process, recognizing that there will be adaptations at different organizations.

The SafeWell Integrated Management System (SIMS) model

The SIMS approach calls for the integration of organizational programs, policies, and practices that address worksite OSH, employee health promotion, and the psychosocial work environment at environmental, organizational, and individual levels. The SIMS approach emphasizes the implementation of a management system using a comprehensive and coordinated program to improve worksite and employee health, safety, and well-being. It recognizes that work and nonwork factors may influence well-being.

The purpose of the SIMS is to:

- Provide employees with a safe and healthful work environment

- Eliminate or reduce recognized occupational hazards, including psychosocial hazards
- Improve and/or maintain optimal worker health and well-being
- Contribute to the ongoing economic sustainability of the organization through reduced duplication of efforts, absenteeism, and improved employee health and well-being

To reiterate, the Safewell approach addresses the work environment, including organizational, social, and operational factors as well as workers' individual health behaviors. The approach links and coordinates policies, programs, and practices of OSH, workplace health promotion, and human resources.

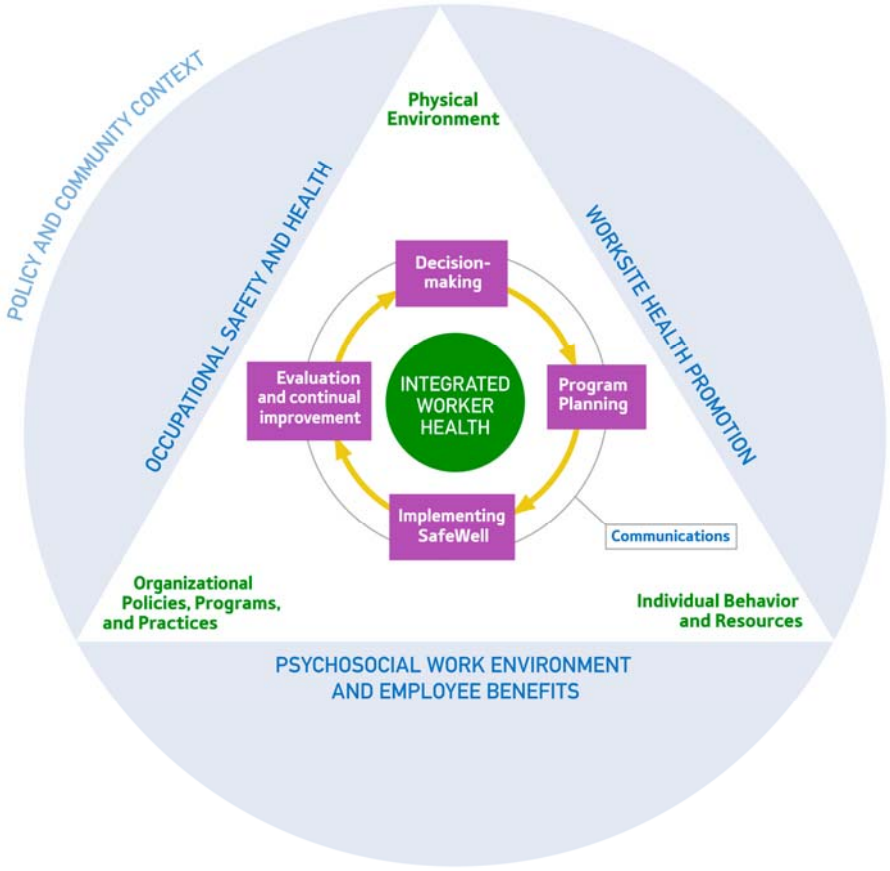

Figure 1: SafeWell Integrated Management System for Worker Health

Figure 1 represents the SafeWell Integrated Management System for Worker Health. As mentioned in the Introduction, SIMS is situated within a larger policy and social context, though the main emphasis of these guidelines is on the components inside the circle, representing the workplace, and the ultimate goal of worker health and well-being.

On the three sides of the triangle rest the three major areas to integrate for worker health (see "Introduction" for definitions):

- Occupational safety and health (OSH)
- Worksite health promotion (WHP)
- Psychosocial work environment and employee benefits (HR)

Within the three corners of the triangle are the three levels of engagement for SafeWell:

- Physical environment
- Organizational policies, programs, and practices
- Individual behavior and resources

The main organizational functions that drive the SIMS are represented by the boxes within the triangle in Figure 1 and are further defined in these Guidelines. The functions include:

- Decision-making
- Program planning
- Implementation of SafeWell
- Evaluation and continual improvement

Communications are an additional important component of each of these functions, so it is represented by an additional box linking to each of the other boxes.

The circle in the middle of Figure 1 is the ultimate goal of SIMS—to achieve and maintain integrated worker health.

While Figure 1 represents a rendition of an optimal integrated management system for worker and workplace health and well-being, an organization may not have every component integrated. The important principles to consider are:

- A systems-level approach that coordinates programs, policies, and practices
- Coordination of OSH, WHP, and HR
- Programs, policies, and practices that address the work environment/organization and worker health and well-being.

Though the triangle's sides and corners in Figure 1 describe the relationships that exist between worker and workplace safety, health, and wellbeing, they lack a description of what drives those relationships to work in a coordinated manner to effect change. These Guidelines suggest that it is the SIMS that will drive change at the worksite. Figure 1 describes the implementation of the SIMS through its five major functions that interact and inform each other. The five functions are described here, and closely mirror those of the Plan-Do-Check-Act management system.[10]

While these functions are described separately, and may be somewhat sequential in nature, in practice a more iterative process may occur at worksite. For instance, if organizational leaders already know that there is a safety and/or health risk, planners do not need to go through an in-depth assessment and analysis phase before they

implement steps to address the problem. Building on early successful attempts at integrating strategies can help to build momentum for further activities.

Integrated decision-making: Organizational leadership and employee engagement

In order for SIMS to be implemented, decisions around certain key organizational tasks need to be made to facilitate integrated functioning. These key organizational tasks are described below.

Program and policy development, implementation, and evaluation

Using the SIMS approach will mean that the phases of program and policy development, implementation, and evaluation will all be conducted through a SafeWell integrated management system lens. The traditional model has departments working separately to develop, implement, and evaluate programs and policies to improve factors relating to OSH, WHP, and HR. The SIMS approach uses decision-making processes that include inter-departmental collaboration and coordination.

Resource allocation

In the traditional workplace, resources are allocated to individual departments, which may result in inefficiencies from duplicative efforts or limit the potential for synergies and linkages if departments worked together. The SIMS approach encourages resources to be allocated to facilitate interdepartmental collaboration and coordination. If vendors are used for some services, they need to be included in, and held responsible for, collaborating with other departmental entities as appropriate.

It is also important to ensure that adequate resources are allocated to address SIMS. The Centers for Disease Control and Prevention (CDC) notes that such resources might include staffing, space, finances (e.g., for vendor contracts or incentives), collaborations with community organizations to conduct health programs (e.g., quit smoking programs, Weight Watchers), equipment, materials, and supplies.[11]

Budgeting

How much will it cost? This is always a difficult question to answer, and there are no studies that currently exist that provide data on how much the SafeWell approach would cost. A lot of it will depend on the comprehensiveness of the program, the size of the organization, and the variability in costs depending on geographical area. The organization also needs to determine whether it will include employee dependents in its programming and cost calculations. To provide at least some context, it has been estimated that a basic effective wellness program costs at least $100 to $150 per employee (excluding incentives and ongoing individual health coaching costs), with returns on investment in the neighborhood of more than $3 for every $1 spent.[12] This same author suggests setting up a budget template that includes costs such as:

- Program consultation (either for in-house staff time or a vendor) at 60 hours for start up and 4 hours/month subsequently
- Health screening costs with a target percentage for employee participation
- Health assessment costs with a target percentage for employee participation
- Costs for incentives
- Materials costs for brochures, incentives, prizes, and communications

However, since SafeWell also addresses OSH and recommends integrating systems, there are likely to be additional costs. A study conducted by Goetzel with 43 employers and about 1,000,000 workers found that the median costs companies paid for comprehensive programs equaled $9,992 per employee (in 1998 dollars).[13] These costs for group health, turnover, unscheduled absence, non-occupational disability, and workers' compensation included OSH and HR costs. When expenses related to employee assistance, health promotion, occupational medicine, safety, and work/life services also were included, the combined total per person was $10,365. When focusing on the more basic $9,992 per employee, the author determined that the cost savings for implementing a comprehensive program could be about $2,562 per employee per year, a savings of about 26%. For more detailed information, readers are directed to the NIOSH website that has this report, as well as others about similar topics: http://www.cdc.gov/niosh/twh/history.html

SIMS "Steering Committee"—Leadership Committee

Once top management has approved the adoption of the SIMS, a committee such as a SIMS Steering Committee (SC) is formed. The purpose of the SC is to oversee the development, implementation, and evaluation of the SIMS at the organization. It will report to top management and also will interact with working groups, such as health and safety committees, that already exist or are formed to implement SafeWell (see the section on Employee Engagement below for a description of working groups). The SC embodies and operationalizes integrated management system planning at an organization. Integrated decision-making is best accomplished by a collective of individuals–involving employees and their representatives, managers, and supervisors--representing different organizational departments. One such body is the SIMS Steering Committee. Organizations can build upon management committees that already exist or broaden the focus of existing safety and health committees.

Potential roles of the SC include:

- Review and analyze collected data and information using an integrated lens
- Identify priorities that are important to the worksite and address an integrated comprehensive approach
- Set goals and objectives for integrated policies, programs, and practices
- Recommend adequate resource allocations that support integrated policies, programs, and practices

- Make policy and program decisions that are comprehensive, based on evidence, and include input from various worksite groups
- Facilitate SIMS implementation by assigning necessary champions/working groups and responsible person(s) to carry out various safety, health, and health promotion programs
- Report progress to upper management
- Communicate activities to all levels of employees from management through employees
- Incorporate input from employees through their representatives on the SC
- Provide accountability for the SIMS to upper management and working groups
- Review program operations annually to assess progress and adapt goals and strategies as necessary

Who should be included?

In order to facilitate integrated management systems decision-making and implementation, it is advised that the SC include management representation from all departments involved with workplace health and safety, as well as worker health and well-being. As an example, the IOM developed a model for the National Aeronautics Services Administration (NASA) supporting Employee Total Health Management.[2] Adapting the NASA model, managers responsible for the following areas contributing to health and well-being could have representation on the SC:

- Health insurance provider/coverage
- Disease and case management
- Physical fitness
- Absence management (disability, workers' compensation, credentialing)
- Primary care centers
- Community relations/outreach
- Wellness programs
- Health risk appraisals and other health evaluations
- Communications
- Occupational/environmental safety and health (e.g., safety, environmental management, equipment, patient safety, hazard surveillance, emergency management)
- Behavioral health (Employee Assistance Programs, work-life)
- Quality improvement
- Health advocates and coaches
- Information technology/data management folks

These representatives will likely be managers, but high-level employee representatives such as union representatives should also be included. Some of these areas may already

have their own working groups consisting of managers and employees. Bilateral relationships between such employee working groups within departments and the SC are encouraged. Employee input is received by the SC through their representatives on the SC, and the SC must be accountable and report to working groups as well. Roles, responsibilities, and members of working groups will be outlined in more detail below in the section on Employee Engagement.

Program planning

Once decisions have been made, resources allocated, and committees or staff appointed, program planning may begin in earnest. The program planning function includes:

1. Assessment of environmental, organizational, and individual level factors influencing worker health and well-being
2. Prioritization of worksite objectives
3. Development of an integrated program plan
4. Communication about results and the plan to the worksite

These activities will investigate and target programs that integrate OSH with WHP at the environmental/organizational and individual levels. “Chapter 2: Program Planning” outlines these steps in detail and provides links to existing resources. To assist in these efforts, an organization may want to consider having a coordinated approach to the data management function.

Integrated information/data management

A major driver of integrated decision-making will be information received from worksite data. The purpose of the information/data management function is to coordinate and integrate data gathering, management, and analysis across the organization to inform decision-making; provide accountability; contribute to improvement; and support surveillance, longitudinal analysis, and knowledge discovery.[2] This is accomplished by using an organization-wide approach.

Typically, different departments have different ways of collecting information that are specific to their particular needs or requirements. While important, this traditional way of operating misses opportunities for synergies across departments, and may lead to inefficiencies in data collection. Although setting up integrated data systems is challenging, in the long run they will provide more comprehensive information, allowing fuller understanding of the “big picture” and aiding in integrated decision-making and planning. More information on the types of data to collect and analyze is included in “Chapter 2: Program Planning” and “Chapter 4: Evaluation and continual improvement.”

Implementing SafeWell

Once priorities and an implementation plan have been developed, approved, and communicated to all worksite stakeholders, the SIMS oversees and monitors the implementation of SafeWell at the workplace. “Chapter 3: Implementation” describes

how to implement SafeWell at an organization and provides suggestions for SafeWell integrated activities. To support total worker health and well-being, SafeWell encourages the implementation of policies, programs, and practices at environmental/organizational and individual levels. The SafeWell approach also entails integrating OSH with WHP and worker well-being for its implementation activities. While SafeWell recognizes there are functions and activities unique to each area, coordinating and integrating activities may result in improved worker health and well-being.

An important component to implementing SafeWell is ongoing communication and feedback between the worksite champion or working groups tasked with implementing SafeWell and the Steering Committee. See the employee engagement section below for roles and responsibilities of these individuals/groups.

Evaluating and continually improving

"Chapter 4: Evaluation and continual improvement" outlines the purposes and types of evaluation to consider. As part of the SafeWell approach, a multi-level evaluation (i.e. environmental/organizational and individual) is encouraged that incorporates a review of the success of policies, programs, and practices in meeting goals and objectives.

Ongoing data gathering, monitoring, audits, and evaluation may occur as part of the SIMS. Corrective action may occur to improve programs or policies that may not be working as initially intended. This process will entail management review that will lead to further decisions, planning, implementing, and evaluating. In other words, there will be a continuous cycle of improvement for implementing SafeWell, driven by the SIMS.

Communicating

The last major component of SIMS is the development and implementation of an active communications plan. This component is stressed repeatedly throughout these guidelines. This function provides information to, and receives information from, the worksite community about SafeWell. It can address:

- Why SafeWell is being implemented
- Who will be involved
- What the SafeWell program intends to do
- When the SafeWell program will be conducted and for how long
- Where activities will occur
- How SafeWell will be implemented

Importance of communication to the SafeWell approach

Clearly communicating about worksite changes to improve OSH conditions and the health of workers is important for reaching goals.

Research has found that employees are more likely to make behavioral changes when they see management make positive changes to the work environment.[5] Planning to communicate about changes made to the work environment is important and can be done through newsletters, the intranet, and at staff and other meetings.

Clear and consistent communication can address misconceptions or myths that circulate among staff that can sink the program and reduce participation in it at each phase – assessment, planning, implementation, and evaluation.

It is important to plan to communicate frequently and consistently—at all phases.

Communication is a two-way street. The best ideas about programs, policies, and practices may come from employees. Employee participation is an important component of the communications plan. To achieve optimal outcomes, a communication feedback loop may be considered so that ideas about and response to programs, policies, and practices may flow freely.

Here are some characteristics of the SIMS approach to communications:

- Occurs at all phases of SafeWell: Leadership and management commitment, assessment, planning, implementation, and evaluation
- Is multi-lateral: An exchange of information from top to middle management, from middle management to employees, from employees to management
- Includes consistent messaging
- Is ongoing: Regular reporting mechanisms that are appropriate for different worksite audiences should be included in the plan
- Supports a culture of health

Think about making all communications (including reports, newsletters, memos, etc.) accessible to the different audiences that exist at worksite. This means that different communications may need to be developed for different stakeholders. Top management may want a brief presentation or synopsis for consideration. Managers may need more detail if they are being asked to help implement the program. Materials for employees need to be written in languages, styles, and at levels that are understood by them.

More guidance in setting up a communications plan is available from the CDC: http://www.cdc.gov/workplacehealthpromotion/planning/communications.html

Final note on implementing the SafeWell approach

An organization may have varying degrees of existing sophistication of these five functions that are important to consider for carrying out the SafeWell approach. An organization may have multiple individuals and departments that might need to be involved in such an approach, or might have a steering committee that could make all these decisions itself. This depends on the complexity of the organization. For example, in some organizations, one or a few individuals might make decisions about resource allocation and interdepartmental collaboration and coordination (decision-making),

while in other organizations many individuals will need to be involved. Information and data will need to be analyzed, priorities made, and evaluations conducted (program planning and evaluation). Again, this could be one person, or a group of individuals that will need to oversee SafeWell implementation. In order for SafeWell to be successful, employees at all levels will need to know what is going on, why and how SafeWell is being implemented, and what the results are (integrated communications). This may be the responsibility of one person or a number of individuals/departments. Finally, it is important to remember to engage employees in this process, and more on that is described below in the section below on Employee Engagement.

SIMS Checklist

Does the organization have an integrated management system? Below is a checklist of questions to answer about whether an organization has an integrated management system. If answers to all these questions are "yes," an integrated management system exists! If answers to any of the questions are "no," these are areas on which to work. Topics in the checklist are covered in the chapters indicated in parentheses.

Checklist for a SafeWell Integrated Management System

System	Yes	No
1. Have integrated decision-making systems been developed?		
a. Is there interdepartmental collaboration, coordination, and decision-making around developing, implementing, and evaluating programs and policies to promote and protect worker health? (Ch. 1)		
b. Have the health and safety management program and worksite health promotion program been integrated where possible? (Ch. 1)		
c. Are adequate human and fiscal resources allocated to implement SafeWell? Does the program have a budget? (Ch. 1)		
d. Are resources allocated to support interdepartmental collaboration and coordination? (Ch.1)		
e. Do vendors and their staff have the experience and expertise necessary to coordinate with and/or deliver the SafeWell approach? (Ch. 2)		
f. Are staff trained in explaining and conducting the SafeWell approach? (Ch. 3)		
g. Has a SafeWell Steering/Leadership Committee been appointed and activated? (Ch. 1)		

h. Does the Steering Committee have representation (management and employee) from occupational health, health promotion, and human resources? (Ch. 1)		
2. Do integrated program planning, implementation, and evaluation occur?		
a. Is there knowledge about what data are already collected? (Ch. 2)		
b. Is there knowledge about who collects, analyzes, stores, and communicates about data? (Ch. 2)		
c. Have discussions occurred regarding the use of integrated data systems? (Chs. 1, 2, 4)		
d. Has it been possible to integrate data systems across the organization to coordinate data gathering, management, and analysis? (Chs. 2, 4)		
e. Have the data been analyzed and interpreted by members from OSH, WHP, and HR? (Ch. 2)		
f. Has consensus been reached on integrated priorities? (Ch. 2)		
g. Has a consensus program plan been developed that integrates OSH, WHP, and HR to help achieve goals? (Ch. 2)		
h. Has the integrated SafeWell approach been implemented? (Ch. 3)		
i. Has evaluation and corrective action occurred? (Ch. 4)		
3. Is there a multilateral communications program?		
a. Are different communications vehicles used? (Ch. 1)		
b. Are communications appropriate for the various types of employees and management that exist? (Ch. 1)		
4. Are all levels of employees engaged? (Ch. 1)		

Employee engagement

This section outlines the importance of employee engagement to the SafeWell approach and identifies seven potential ways to engage employees.

Importance of employee engagement

The SafeWell approach necessitates programs, policies, practices, and action at different levels within an organization. Different levels of employees have responsibility for different levels of action and all can be champions of SafeWell. A program is more likely to be successful and relevant if all levels and sectors of stakeholders are involved in planning: managers and owners, nurse supervisors, floor staff, contract workers, and union locals where they are part of the workforce. For example:

- **Upper management** may have control over resource allocation, such as what resources are available to reduce injuries and to which departments those resources will go.
- **Middle managers** influence how or if programs are implemented, and whether their employees participate in programs.
- **Employees** provide ideas and decide whether to participate in programmatic offerings.
- **Unions** influence policies, programs, and individuals.

The advantages of broad-based input

Broad-based participation in planning can enhance management buy-in and program participation and effectiveness–two of the main drivers of successful outcomes. Having a wide range of input makes it more likely that the programs developed will be:

- Responsive to multiple stakeholder needs and priorities
- Culturally appropriate
- Matched to employees' readiness and experiences regarding program implementation
- Reflective of the overall context of the organization[2]

There are also some pragmatic reasons why employee engagement is important:

- It is a way to communicate about management changes at the workplace to make it safer and healthier, i.e., such changes can be communicated to all employees who can continue to relay the message to their peers.
- Concerns of mid-level supervisors can be expressed and addressed if they are also involved in planning.
- Participation fosters a sense of ownership of the program—for all levels of employees, from top leadership to floor supervisors to floor staff.
- Employees have first-hand knowledge about safety and health issues at the workplace. Their involvement in addressing them can lead to practical and effective strategies.
- Employees are more likely to participate in activities when they are involved in planning and implementing the program.

- Employees who participate provide invaluable endorsement and word-of-mouth promotion for program activities.
- Employees bring promotional materials to their departments and distribute educational materials to co-workers who are unable to participate due to work demands.

Keep in mind that in addition to vertical integration in planning (i.e., rank--floor staff, white collar workers, physicians, service workers, supervisors), representation needs to be equal and diverse across departments and work processes (e.g., maintenance, nursing, information technology, marketing, administration), locations, (on-site and remote), gender, age, and ethnicity.

Seven ways to engage employees

There are many opportunities to engage employees in the SafeWell approach. The level of employee engagement may depend on resources and priorities. Most workplace and worker health program planning guides encourage involving employees in the planning and implementation of health programs. SafeWell suggests creating a system that will maximize employee participation at the same time it contributes to their well-being, as well as to the health of the organization. Seven potential ways to engage employees are detailed below.

1. Ask employees what is important to them

At the most basic level, ask employees what types of health concerns they have and in what types of health programs they would participate. However, when employees are asked what they think is important, be prepared to act on their suggestions. Raising employee expectations without some concomitant action by management may impact employee morale and participation.

Employee input may be obtained during the assessment and planning process through surveys, focus groups, and interviews (which will be discussed in more detail in “Chapter 2: Program Planning”).

- Employee interest and needs surveys may assess levels of interest in health promotion and health protection topics and identify employee health needs at all levels. This information can be useful in identifying the range of programmatic interest and in setting program priorities.
- Vendors could be hired to conduct focus groups of all levels of employees to identify concerns or receive feedback on programs or practices. Employees might be more frank with an external vendor, especially when confidentiality is assured. (See “Chapter 2: Program Planning” for more on choosing a vendor).
- Staff from the OSH department may conduct individual interviews with employees to assess working conditions.

2. Discuss roles in accomplishing SafeWell goals

Different levels of employees have different roles in making the SafeWell program a success.

- **Top management** takes a leadership role in articulating the vision and its commitment to the approach.
- **Mid-level management** is crucial to the program's success as it often holds the power to encourage employee participation. Being also accountable to upper-level management for the organization's success, mid-level managers have the dual responsibilities of building and sustaining a productive workforce, as well as contributing to the fiscal soundness and deliverables of the organization. Thus, mid-level managers need to understand and commit to their role in achieving the goals of the SafeWell program.
- **Employee** participation and engagement is critical for planning and implementing the SafeWell approach. If employees do not participate, it will be difficult to reach goals.

Challenges and tips from the Field

Challenge: Supervisors are reluctant to provide work time for employees to participate in health programs.

Tips

1) The person(s) responsible for SafeWell implementation may meet with supervisors before the SafeWell program is implemented to hear their concerns and answer questions about the program and management commitment.

2) Implementers may provide information on the program to the worksite community through different communication vehicles.

3) Some companies might link employee health to supervisor performance reviews.

3. Form or expand existing working groups

As mentioned above in the description of the SafeWell Integrated Management System, a worksite could have a *Steering/Leadership Committee*, for overall site planning, decision making, and coordination, and *Working Groups* to accomplish specific tasks. At some organizations these two groups may be merged into one organizing body. The number of committees/working groups at an organization may depend on its size, complexity, resources, and the expected scope of the program. Consider building upon and integrating existing committees such as OSH or WHP committees.

Integrated Working Group membership—a one-committee approach: If an organization is unable to support a Steering Committee and Working Groups because of size, workflow, or other considerations, one critical organizing body can be formed with management and employee representatives from:

- Human Resources
- Occupational Safety and Health
- Worksite Health Promotion

This organizing body could be augmented with floor or unit champions (see #4 below).

Integrated Working Group membership—a multiple-committee approach: For larger organizations, consider having an overall Steering Committee (see section on "Establishing a SafeWell Integrated Management System" above) and multiple Working Groups that may include representatives from employees and management. Working groups can be very small or can be larger committees with smaller groups designated for specific tasks. Think about building upon existing workgroups, potentially by integrating them with representatives from different departments. For instance, working groups may:

- Be built upon pre-existing Safety and Health committees or wellness committees, with an expanded agenda, and reflective of a more integrated approach to worker health
- Consist of departments with a direct or indirect connection to health outcomes such as human resources and benefits, safety and health, risk management, medical/employee health, training
- Include additional participation from ancillary departments that may be critical for key interventions. For example:
  - Food service manager for changes in menu or vending machine choices
  - Facilities and maintenance for changes to the physical environment
  - Purchasing for identifying appropriate vendors
  - Communications for developing promotional strategies and materials

Roles of working group members: Working group members are the interface between the program and the employee. As explained above, the influence of these Working Group employees can be critical to the success of a program.

- Managers may address resource needs and consider interdepartmental budgeting and staffing.
- All members may provide suggestions and input on planned activities and events.
- Managers and employee representatives may guide the adaptation of plans to their specific departments' needs (e.g., night shift employees).
- Employees may promote the program to their co-workers.
- All members assist in carrying out the program plan.

Notes from the field

The WellWorks-2 project was an integrated approach to worker health implemented in 15 manufacturing companies in Massachusetts. Similar approaches could be conducted in large health care organizations.

The WellWorks-2 study included an intervention plan that put employee committees, called Employee Advisory Boards (EABs), at the center of program planning and implementation. Employee representatives from line workers, management, and unions were invited to join an EAB at each company.

Management and worker representation were equally important to successful planning. Managers were important because of their decision making and resource allocating authority, while workers ensured that programs reflected the needs and interests of employees.

To form each board, first one or two employees were designated as primary contacts. They were often occupational health nurses, health and safety personnel, or human resources managers. These people solicited recommendations for potential EAB members from department managers, union representatives, and various levels of management and workers. Job descriptions for EAB members outlined their roles and responsibilities. Some candidates came forward themselves, some were nominated by supervisors or co-workers, and some were assigned or appointed. Typical EAB members included:

--Production and manufacturing workers

--Support and secretarial staff

--Managers from all departments, including fiscal, human resources, production and purchasing

--Occupational health nurses and physicians

--Fitness center directors and staff

--Union members

--Food service staff

--Health and safety specialists

--Communications, advertising or sales staff

A sample memo soliciting EAB members and an EAB job description are in Appendix 1.

Labor-management support*:* Both labor and management support are essential to any effort to promote worker health. Worksites that have labor unions may require different strategies. Since unions provide a structured voice for worker involvement, their inclusion is critical. In addition, union buy-in is necessary to ensure that the program is not perceived as a strictly management initiative, and so the union encourages its members to participate. To encourage floor workers' representation on working groups, top and middle managers need to condone and support such efforts.

Challenges and tips from the field

Challenge: In some settings of the WellWorks-2 project, it was difficult to release line workers from their work to attend meetings and activities.

Tips: Staff involved with survey implementation might have had more discussion with and engagement of mid-level managers. Perhaps advisory board meetings could have been held at a different time when line workers could have attended, or arrangements could have been made to cover for those workers. Other ways to receive employee input in those companies included working through company OSH Committees, employee social committees, or individual department groups working together to plan and implement programs.

4. Appoint/recruit floor champions

An alternative model that has been used by the "Be Well Work Well" project, a collaboration between the Harvard School of Public Health Center for Work, Health and Well-being and Partners Health Care, includes an overall organizing committee and the deployment of floor champions. This project is using the SafeWell approach and aims to improve physical activity and reduce low back pain disability in patient care workers.

Notes from the field

The Be Well Work Well project outlined the following roles and responsibilities of floor champions (2-3 per unit to reflect different shifts), who were selected by management to:

--Act as a liaison between the coordinating committee and patient care workers

--Oversee the implementation of program activities on the unit

--Assist in problem solving issues of safe patient handling, worker safety, and ergonomics on the unit

--Act as a role model in the adoption of program components

--Encourage worker participation in the program

--Provide feedback to the coordinating committee on feasibility and receptiveness of planned program activities

--Communicate with other floor champions (e.g. from other shifts) and resource nurses on the unit

Specific duties included:

--Participation in a brief training

--Meeting with coordinating committee every two weeks

--Keeping informed about program theme content

--Communicating program messages and results of reports with co-workers

--Discussing challenges with program delivery to coordinating committee

5. Use meetings strategically

Another way to obtain employee input is to organize regular staff meetings in such a way that employees can express key concerns as soon as possible.

Consider incorporating information and feedback about the SafeWell program into agendas for existing organizational meetings at all levels.

6. Use company channels of communication

Use existing organizational channels of communication to solicit and encourage feedback on planning ideas from all employees (e.g., articles in newsletters, on intranet, etc.). Make it easy for all levels of employees to respond.

7. Consider whether/how to include employee dependents

It is important at the beginning of the program to address how the dependents (i.e., family members) of employees will be involved in SafeWell. Dependents are important in employees' lives and impact their safety, health, and well-being. For instance, a family member may inadvertently expose an employee to an illness which s/he may bring to work (e.g., colds, flu, or other infectious diseases). Also, whatever is purchased, prepared, and consumed for food outside of the workplace may impact employee health. Dependents may also support employee participation in healthy behaviors, such as agreeing to quit smoking with the employee.

If employees have health insurance that covers dependents, an organization may decide that the health and well-being of all family members is an important business goal. At the most comprehensive level, management might decide to cover dependents and allow them to be eligible for all SafeWell activities. At a basic level, SafeWell programs might include materials that address safety and health at home (See “Appendix 1: Program B: Carbon Monoxide Testing” in “Chapter 3: Implementation” for an example).

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Appendix 1: Soliciting Employee Advisory Board (EAB) Members and EAB job description (examples from the WellWorks-2 Project)

JOIN!!

<<ORGANIZATION NAME>> - SafeWell

Employee Advisory Board (EAB)

WHAT IS THE EAB?	An official board of employees (6-12 members) that will plan and promote on-site programs for worksite and worker health and well-being for all <<ORGANIZATION NAME>> employees.
WHO CAN JOIN?	Any interested employee from any area of the organization (clinics, administration, facilities) who is willing to help plan and promote activities specific to the needs of employees
	Those interested should possess some of the following skills:
	- Leadership abilities
	- Ability to communicate SafeWell messages throughout the organization to fellow workers
	- Ability to spend a minimum of one hour per month attending EAB meetings with the potential of more time on special projects
	- Desire to help provide healthy programs and a safe and healthy work environment for all employees
HOW CAN I JOIN?	You can volunteer up until <<Month, date, year>> by contacting:
	<<Designated contact person and phone/e-mail>>
	S/he can answer your questions about SafeWell and the Employee Advisory Board
WHEN DOES THE EAB BEGIN?	The first meeting is scheduled for <<Month, Date, Year>> at <<Time,>> in <<Place>>

Position description: Employee Advisory Board member

TITLE:	Employee Advisory Board member
HOURS:	One hour per month at Employee Advisory Board Meetings plus several hours per month on SafeWell activities
MEMBERSHIP:	Members will be selected to represent a broad range of departments and groups in the organization (Clinics, Administration, Facilities, and Unions).
DURATION OF TERM:	Prefer a one year minimum. Members can serve several terms.
SUMMARY:	The Employee Advisory Board is critical to the success of SafeWell. Board members will reflect the interests of a broad range of employees. They will help plan and deliver SafeWell at the worksite, adapt it to the organizational culture, and serve as program spokesperson in the worksite.

Responsibilities:

- Attend meetings of the Employee Advisory Board
- Provide information about characteristics of their worksite area or department to SafeWell Steering Committee or program champion(s)
- Work with Steering Committee, working groups, and/or SafeWell program champion(s) to develop, plan, and deliver the program
- Act as a liaison to the Steering Committee or SafeWell program champion(s) to advise them on the best methods for promotion and delivery of assessments, programs, and activities
- Assist with evaluation, program planning, implementation, and communications
- Convey SafeWell messages to other employees

Chapter 2: Program planning

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Chapter overview

Any successful worksite health program is built on a well-informed plan. This chapter discusses three main components to program planning, suggestions for conducting these components, and strategies for applying the SafeWell approach to program planning efforts.

An important first action to implementing a successful worksite health program is to appoint a person or group of persons to integrate and coordinate SafeWell program planning activities at the worksite (e.g., Steering Committee and/or working groups as included in "Chapter 1: Providing the Foundation"). This person/group will be accountable for implementing the components to program planning that are covered in this chapter.

In order to develop a well-informed plan, it is recommended that organizations conduct all three of the following components to at least some degree. Subtopics provide additional information for the three components

- Assessing organizational resources and needs to inform planning

  - What to include in the assessment process and description of resources
  - Systems for collecting the data
  - Communication re: data collection
- Analyzing the data to inform the planning process
  - Synthesize the data
  - Develop priorities
  - Prepare a report
- Designing a plan for sustainability

While these components are somewhat sequential in nature, there may be overlaps between them. For instance, communications about the planning process is highlighted in the first component with data collection (bullet 1 above). However, good communication about all stages of the program is an important principle underlying the overall SafeWell approach.

The program planning process for the SafeWell approach to workplace health recommends program planning that spans across the departments that traditionally address worker health issues independently, including worksite health promotion/wellness (WHP), occupational safety and health (OSH), and to some extent, human resources (HR). For more information on the role of each of these departments, see the "Introduction."

General support for worksite program planning

There are existing OSH, WHP, and HR planning resources available on-line for worksites and staff interested in more detailed information. Although they do not aim to provide guidelines for an integrated approach, they nonetheless provide useful planning tools. These include:

- *Working on Wellness*, Massachusetts Department of Public Health (MDPH): http://www.mass.gov/Eeohhs2/docs/dph/mass_in_motion/worksite_toolkit.pdf
- *Workplace Health Promotion*, Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/workplacehealthpromotion/model/index.html
- *Safety and Health Management Systems e-tools*, Occupational Safety and Health Administration's (OSHA) e-tools for comprehensive health and safety management systems: http://www.osha.gov/SLTC/etools/safetyhealth/index.html and
- *Guidelines on Occupational Safety and Health Management Systems* (ILO-OSH 2001), the International Labour Organization's guidelines on occupational safety and health management systems (ILO-OSH 2001): http://www.ilo.org/safework/normative/codes/lang--en/docName--WCMS_107727/index.htm.

Assessing organizational resources and needs to inform planning

This section contains guidelines for using a comprehensive approach to assessing workplace resources and needs, and includes: the purpose of assessments, topics to include in an assessment and descriptions of corresponding resources, systems for collecting assessment data, and communications in regards to data collection.

Background and purpose of assessments

Workplace assessments are objective reviews of environmental, organizational, and individual programs, policies, practices, beliefs, and needs. A wide range of workplace assessments exist such as checklists that safety and health personnel complete to assess compliance with Occupational Safety and Health Administration (OSHA) regulations, management reviews of policies concerning nonsmoking at the worksite and health benefits, employee surveys about their health interests and behaviors, and others. Findings from workplace assessments help to drive priorities for the organization.

A workplace's resources include its people, environment, programs, and policies. In order to understand the strengths and opportunities at the organization, all of these may be assessed to guide an effective and well-informed plan.

Conducting worksite assessments serve to:

- Inform the development of priorities and appropriate programs, policies, and practices
- Provide baseline and follow-up measures to benchmark and monitor a program's impact
- Determine the extent to which a worksite is in compliance with Federal and State regulatory, legislative and accrediting bodies such as OSHA, the Environmental Protection Agency (EPA), and the Joint Commission
- Identify opportunities and facilitators for meeting goals and objectives
- Inform continual program improvement

General guidance for assessments: What to consider and include

Decide about goals and priorities

To help decide what to include in the assessments, think about *what the goals and priorities are* that led to interest in adopting the SafeWell approach to worker health. Determining organizational goals, and the objectives to achieve through the assessment, will help in determining and focusing priorities for the assessments. Some of the information needed to address priorities may already be collected at the worksite.

For example, in planning for the assessment, how would the following objectives be weighted in terms of being priorities?

- Improving the satisfaction, safety, health, and productivity of employees: This information can be found through surveys of employees, as well as OSH and HR records.
- Reducing healthcare costs: Information about major cost drivers may be available from the HR and OSH departments and/or from healthcare insurance provider(s)
- Ensuring compliance with Federal and State laws and regulations (e.g., OSHA and EPA) and meeting requirements of an accrediting organization (e.g., Joint Commission) or going beyond compliance: Occupational/environmental health and quality improvement departments may be integral to this type of focus.
- Addressing the organization's employee-centered mission by improving company programs, policies, and practices toward a culture of health: HR, OSH, and WHP can contribute to assessing this potential goal.

Depending on the goals, the questions to be answered from the assessments may differ. Different health assessments have different purposes, so it is important to outline goals clearly before choosing any assessment tools. To determine key questions for data collection, an option to consider is to facilitate a discussion among members of the steering committee/planning group (discussed in "Chapter 1: Providing the foundation"). Getting perspectives from management and employees may help to inform the entire process. As a starting point, consider asking the following questions which have been adapted from CDC's Toolkit for Workplace Health Promotion, which is available online: http://www.cdc.gov/workplacehealthpromotion/assessment/index.html.

- What factors are contributing to health-related costs?
- What are the key health issues affecting employees now and over time?
- What are employees' health and safety priority concerns?
- What are characteristics of employees (e.g. demographics) that may influence program planning? For instance, a predominantly older workforce may have different needs and interests than a younger workforce.
- What factors at the worksite influence employee and worksite health? What optimizes health? Where are the barriers?
- Does the organization want to include employee dependents in the assessments and/or programs?
- What measures does the organization want to use to track program progress?
- Do organizational systems support the SafeWell approach to workplace health? Are policies and practices in place to support worker health?

Address goals and allow adequate time and resources

Consider assessments that will address goals and not be prohibitively costly in terms of time and resources. Depending on the complexity of the organization, consider allowing

several months to review various assessments to see which best meets organizational needs.

In addition to taking the time to choose the right assessments for organizational goals, consider the various resources needed. Those who are responsible for conducting the assessments need adequate resources, including:

- Staff
- Time to conduct the assessments
- Direct financial resources if vendors are used to conduct assessments and programming, and/or if incentives for participation are provided

Start smart and scale up

Some of the problems and the strengths at the workplace may already be evident to management and employees. Consider targeting assessments and initial programs to focus on these first, before rolling out broader programs. Demonstrating success on a small scale may build support for subsequent expansion efforts. While the chapters of these Guidelines are sequentially ordered, in practice, worksites may start implementing programs (Chapter 3) before all assessments are finished.

Consider whether to use a vendor to conduct assessments and program activities

In these Guidelines, use of the word “vendor” encompasses for-profit and not-for-profit service providers of OSH, worksite health promotion, and employee benefits, including insurance plans. Many organizations rely on external vendors to conduct their workplace and worker assessments, as well as to provide programming to the workplace and to employees. There are large numbers of worksite health promotion, health insurance, and OSH vendors in the US today. However, none to date have been found that provide comprehensive programming that integrates worksite health promotion with OSH and employee benefits. Nevertheless, using vendors provides some of the following attributes:

- Vendors’ product(s) and services are their business. A health care organization’s primary focus is probably not centered on conducting worker and workplace health assessments and programs. Hiring a vendor allows an organization to focus on its primary product or service.
- Vendors have expertise and knowledge that the organization might lack about worker and workplace health. As a result, hiring vendors may reduce the amount of time and money spent compared to trying to conduct assessments and programs in-house.
- Vendors provide extra help to complete the project. While organizations may have internal OSH-related staff (e.g. safety managers), worksite health promotion staff, and evaluators, they all probably have busy jobs right now, and

incorporating new programs and evaluations into their current tasks may be difficult.

- Vendors may provide anonymity and confidentiality to the assessment process and program delivery. Employees, who might be hesitant about replying to a survey conducted by their employer, might be more likely to respond if they are assured that the vendor will not share their individual results with management.

Kruse mentions three factors to consider when choosing a vendor: cost, value, and service.[1] Following are some specific topics Kruse considers in vendor selection. For a detailed list of questions for each of these topics, please see Appendix 1.[1]

- Customer service: How well will the vendor support organizational efforts—including the SafeWell approach?
- Experience: Does the vendor have extensive experience in the topics required, as well as with the industry? Make sure that vendors are appropriately qualified and staff trained.
- Confidentiality and liability: What procedures are in place to protect employee and employer information? What is the vendor's liability policy?
- Satisfaction (participant and customer): Will the vendor share customer (including individual employee) satisfaction information?
- Metrics and evaluation: What does the vendor provide in terms of evaluation and how often? Will the vendor work with others if integrated information is requested?
- Account management: It may be helpful to assess the extent of the account manager's involvement with the project and what resources s/he has available.

Consider the response rate in relation to the goals and purposes of the assessments

Being clear on the goals of the assessments also influences the response rate to achieve at the individual level. For instance, if a goal is to understand the percentage of employees who smoke or who have diabetes, it is important that the participation rate of individual level assessments (e.g. a health risk assessment) is reflective of the worksite population. That means it is important to have participation of a majority of the worksite population (e.g., over 60%), and that those who do participate reflect all types of populations. If certain groups of employees do not participate, it may bias the results or not be a true reflection of health risks (e.g., smoking/diabetes) among employees. If a low participation rate is obtained, one should be cautious about making decisions or conclusions based on the incomplete data.

However, some organizations use the health assessment to provide feedback and coaching to individual employees to maintain and improve their health. If this is the goal of the assessment, lower participation rates are acceptable.

Additional ways to increase participation are presented in "Further recommendations on collecting the data" below.

Specific levels and topics to assess using the SafeWell approach

The SafeWell approach to worker health is based in research showing that addressing both the work environment and workers' individual health leads to improved worker health and management systems. Many factors contribute to a healthy worker, including: healthy food options, good mental and physical health benefits, and a safe and healthy work environment with hazardous exposures eliminated where possible. To guide effective planning for implementing the SafeWell approach, it is important to assess the various factors that contribute to health.

The SafeWell approach includes assessing:

- **Environmental level factors and facilities**: Physical environment, facilities, and exposures
- **Organizational level systems, policies, and practices**: Measured by items such as
  - OSH trends and performance indicators based on injury, illness, and incident records (e.g., incident rates per 100 full-time equivalent employees [FTE])
  - OSH, WHP, and HR policies and programs
  - HR and other organizational policies related to benefits, compensation, staffing, and scheduling
- **Individual-level:** Characteristics, health status, behaviors, needs and interests, workplace injury and illness reports

Some of these categories overlap. For instance, occupational health and safety factors may be assessed at environmental, organizational, and individual levels. The worksite environment may be assessed by walkthroughs by a safety officer or industrial hygienist. Furthermore, the work environment assessment may include reviews of OSH-related policies and programs to protect employees from various hazards, as well as analyses of employee worksite injury, illness, and other incident records.

Description of SafeWell assessments for planning purposes

The complexity and sheer number of potential assessments may be daunting. The organization may already collect a lot of these data, but not in a coordinated and integrated manner. Or the organization may be just starting out on such a journey. Organizations tend to be at different places on the continuum of striving toward a fully integrated system. Table 1 identifies a minimum set of sample assessments that may be considered as adhering to the SafeWell approach. Additionally, an "enhanced" level of assessments is articulated that may be considered if resources allow and goals and interests align. Later in the chapter, additional ideas of how to choose which assessments to use are provided.

Table 1: Suggested basic and enhanced SafeWell assessments for planning purposes

Level	Environmental	Organizational	Individual
Basic	**Compliance** OSH auditing and compliance tool Joint Commission compliance (if applicable) Food and fitness facilities	**Integrated Management System** SIMS checklist **Policy and program review** *OSH* Identify existing policies and programs *WHP/HR* Stress Tobacco use Nutrition Fitness Benefit design	**Employee health and interests** Employee needs, satisfaction, and interests survey **Employee occupational health and safety** Employee/supervisor injury and incidence form
Enhanced (basic level plus)	**NIOSH guide to prevent slips, trips, and falls among healthcare workers** **Patient Care Unit and Worker Safety walkthrough** **CDC's worksite health environmental assessment**	**Programs and Policies** WW2 OH mgt system survey OSHA's bloodborne pathogens standard Safe patient handling programs OSHA's Ergonomic Guidelines for Nursing Homes MSD prevention Disability management and return-to-work OSHA's resources for violence prevention JourneyWell's Dimensions of Corporate Wellness CDC's "additional measures" Review of employee record data (e.g. claims analysis, absenteeism) Review program costs	Health Risk Appraisal (HRA) with feedback Biometric screenings Focus groups Individual interviews

Basic SafeWell assessments for risk and hazard identification: Environmental, organizational, and individual-levels

Companies use a wide range of information and data to inform program planning. Decisions about which to use can be based on resources, interests, needs, and priorities. Table 1 above indicates suggested types of assessments within each of the three levels:

environmental, organizational, and individual. Some of these assessments may fall into more than one level, as the lines blur sometimes between the levels. Within each of these levels, it is recommended that OSH, WHP, and HR factors be addressed to some degree to qualify as using the SafeWell approach. This section describes the basic level of assessments needed and provides suggested tools for the assessments.

Basic level assessments are most appropriate for healthcare facilities with lower levels of resources to commit to an assessment, or for those organizations just beginning to use the integrated approach to worker health.

Basic environmental level assessments

Environmental assessments review the safety and healthfulness of physical facilities at the worksite, as well as management efforts to meet legal and regulatory requirements. They are often conducted by walkthroughs of different areas of the workplace. These assessments may also include reviews of organizational level programs and policies, so there is not always a firm demarcation between environmental and organizational level assessments. Findings from the assessments can be used to ensure compliance and develop OSH and WHP policies and programs to support worker health.

There are two types of basic environmental-level assessments:

1. Compliance with Federal, State, and Local regulations, and the Joint Commission (if applicable to the healthcare organization)
2. Food and fitness facilities

1. Compliance in healthcare facilities: At a minimum, healthcare facilities need to comply with a number of Federal, State, and local laws and regulations on safety, health, and environmental protection. These include, but are not limited to, requirements of:

- Federal Occupational Safety and Health Administration (OSHA)
- State OSHA Plans
- Environmental Protection Agency
- Department of Transportation
- The Joint Commission: -Hospitals and healthcare organizations may want to comply with the requirements of the Joint Commission which accredits 10,000 healthcare organizations

Worksites in the healthcare industry might ask their responsible safety and environment personnel/units to conduct compliance worksite analyses.

Auditing and compliance tool from the field

Dartmouth-Hitchcock Medical Center in Lebanon, NH uses an auditing and compliance tool that is attached as Appendix 2. It is a basic assessment of occupational health and safety management practices that is relevant for healthcare institutions that adhere to

accreditation practices of the Joint Commission, as well as to Federal and State mandates and regulations. It should be complemented by walk-through assessments of the physical environment, tailored to a particular worksite.

1a. The Joint Commission's tools

For those healthcare institutions interested in accreditation or maintaining their accreditation, The Joint Commission has many resources available through its website regarding accreditation measures. Some of these need to be purchased. The main web portal is at: http://www.jointcommission.org/

1b. Another available tool

OSHA's Hospital eTool is an interactive, highly illustrated, web-based training tool containing graphical menus and expert system modules. The Hospital eTool aims to provide reliable advice on how OSHA regulations apply to the hospital and personal healthcare settings. At least 18 categories of potential hospital-wide hazards, and solutions to addressing those hazards, are given. In addition, the e-Tool illustrates specific hospital areas for hazards and preventive measures against them. The tool is available at: http://www.osha.gov/SLTC/etools/hospital/index.html

2. Assessing food and fitness facilities: It is important to assess the health behavior environment such as healthy food options and fitness facilities/options to provide information on two basic factors that can influence health and wellbeing.

2a. Food facilities

For food facilities this would include assessing whether an on-site food service exists including cafeterias or vending machines:

- If on-site services do not exist, what food choices exist in the geographical area (e.g., none, mobile trucks, fast food or sandwich shops)?
- If there are on-site services, do healthy food options exist, are these healthy options highlighted, and are pleasant surroundings available for employees to relax?

2b. Fitness facilities

For fitness facilities this would include assessing whether fitness facilities exist in the worksite, including accessible and safe stairwells and walkways. If on-site facilities exist, they should be assessed to see if they adhere to recommended standards. The American College of Sports Medicine has guidelines that provide tools for doing this.[2] If fitness facilities do not exist, a company could assess whether there are safe and accessible opportunities available in the surrounding area.

Tools available from the field

Massachusetts Department of Public Health's (MDPH) Working on Wellness toolkit includes a Worksite Health Improvement Survey tool that asks many questions about food and fitness options at the worksite and its environs. Sample questions include:

> **-Does the organization provide point-of-purchase nutrition information in the cafeteria, canteen truck, and/or vending machines?**
>
> **-Does the workplace promote the use of stairs? Does the organization subsidize memberships to an off-site fitness facility directly or through a health plan?**

The toolkit is available at:
http://www.mass.gov/Eeohhs2/docs/dph/mass_in_motion/worksite_toolkit.pdf

North Carolina's Eat Smart Move More campaign, promoted by CDC, has a detailed toolkit with easy-to-use surveys for assessing the food and physical activity environment at the worksite. The particular assessment is called "Policy and Environment Survey" and is available as Appendix J at:
http://www.eatsmartmovemorenc.com/NCHealthSmartTlkt/CommitteeWrkBk.html

The CDC's Healthier Worksite Initiative has a wealth of toolkits it recommends. The home page is available at:
http://www.cdc.gov/nccdphp/dnpao/hwi/index.htm

Basic organizational level assessments

The purpose of organizational level assessments is to understand existing policies, programs, and practices that support, or compromise, worksite and worker health and well-being. In conjunction with other assessments, this review can illuminate policies and programs that might be adopted to support broader company goals. For instance, instituting worksite-wide policies such as bans on tobacco use on company grounds have been shown both to improve productivity and to reduce tobacco consumption. While they often incorporate policy document reviews, they can also include reviews or analyses of administrative data (e.g. cost data).

Assessments that are recommended as basic organizational level assessments include:

1. A checklist assessing the state of the integrated management system at a worksite
2. Reviews of OSH, WHP, and HR policies, programs, and practices

Reviewing OSH, WHP, and HR policies, programs, and practices informs management of existing activities and opportunities for improvement, and ways to develop plans for an integrated approach to worker health.

1. Assessing the SafeWell Integrated Management System (SIMS)

Completing a review of a worksite's SIMS (see Chapter 1 for an explanation of SIMS) allows an organization to see programs and policies that currently exist, or could be implemented or better integrated, to improve worker health and well-being. Results of the review may drive goals and priorities. It also allows for management to talk across departments of OSH, WHP, and HR and to plan accordingly.

1a. SIMS checklist

A checklist for management to complete assessing the SIMS is included in Appendix 3 of this chapter. Top management and management responsible for OSH, WHP, and HR may complete the checklist and discuss together with the steering committee (see "Chapter 1: Providing the foundation").

2. Assessing worksite policies, programs, and practices for worker health and well-being

The most important occupational safety and health assessments for the basic level are the audit and compliance tool and walkthrough assessment to ensure compliance with laws and regulations. These are described above.

2a. Identify OSH policies and programs

For the basic level organizational level assessments in OSH, merely identifying policies and programs that currently exist at the organization will assist in program planning. For a health care organization these may include programs to comply with OSHA's bloodborne pathogens standards, safe patient handling legislation by various states, and/or violence prevention policies . These policies and programs are detailed further in "Enhanced level of organizational assessments" below.

2b. WHP/HR policies and programs

Additional reviews of company policies, programs, and benefit designs to support employee health and contain costs may be conducted through the HR and WHP departments. As key drivers of health, policies and programs addressing stress reduction, tobacco use, and healthy food and fitness options may be assessed. Examples of areas to be assessed:

- Stress reduction
  - How work is organized--its pace, intensity, the control allowed over one's own work process, work hours, compensation, and employment security—can be as hazardous or benign to workers' health over time as safety, chemical, physical, or biological job hazards. Poor work organization has been found to be hazardous to mental health and associated with depression and burnout

as well as a contribution to serious physical health outcomes such as back pain and other musculoskeletal disorders, hypertension, heart disease, stroke, Type II diabetes, and even death.[3] A safe work environment includes preventing psychosocial hazards. It adapts to the needs and limitations of workers and allows them to participate in designing their workstations, schedules, and duties.[4]

- As part of the assessment process, consider reviewing staffing levels, scheduling of work hours (e.g., how long are shifts, do employees have consistent shifts or do they rotate, can employees choose which shifts they work), flex-time policies, and break polices and practices as part of addressing stress reduction.

- Tobacco use: Assessments regarding tobacco use may address whether written policies exist about workplace tobacco use. For example, is tobacco use allowed on-site?
  - If so, where may tobacco use occur? What types of measures are in place to address exposures to secondhand smoke, tobacco waste, and potential fire hazards?
  - If not, are there physical areas where tobacco waste is found? How is noncompliance with the policy addressed? Is there prominent signage alerting employees and visitors about the policy, and penalties for noncompliance?
  - Are benefits in place to support employees who want to quit smoking?
- Nutrition and fitness: Review benefits to assess whether healthy nutrition services and fitness opportunities exist. For instance, does the health plan cover Weight Watchers or subsidize gym memberships?
- Benefit design: To support worker well-being, review health care benefits to determine whether the insurance plan(s) cover preventive services (e.g. cancer screenings, well-baby visits, annual check-ups) and mental health services.

Tools from the field

MDPH's Working on Wellness Worksite Health Improvement Survey: The MDPH toolkit, referred to in the above section on environmental assessments, includes a Massachusetts Worksite Health Improvement Survey containing questions about healthy food and fitness options, tobacco use, stress reduction, and occupational health and safety.
http://www.mass.gov/Eeohhs2/docs/dph/mass_in_motion/worksite_toolkit.pdf

STRESS AT WORK website: This website from NIOSH includes various sources related to the NIOSH job stress research program

that aid understanding the influence of work organization or psychosocial factors on stress, illness, and injury; and identifying ways to redesign jobs to create safer and healthier workplaces; and (3) measuring the quality of work-life.
http://www.cdc.gov/niosh/topics/stress/

Basic individual level assessments

The purposes of individual level assessments are to understand work and non-work factors that may influence the health, safety and well-being of employees; and to track progress of implementing the SafeWell approach. They are usually conducted through surveys or through group or individual interviews. Topics may include the health status, behaviors, and risks of employees, including occupational injuries and incidents. It is also important to know which worksite programs would be appealing to employees. Before conducting the assessments, address whether there are any particular considerations that should be made to ensure that assessments are appropriate to the workforce. For instance, are assessment materials needed in different languages if there is a diverse workforce, or in larger print if there is an older workforce?

Confidentiality of employee input is critical and needs to be communicated to employees. If employees think they might be fired for truthful responses, they may not participate. If participation is low, programmatic results may be hampered too. Participation is critical to a program's success. Basic individual level assessments include:

1. Employee Needs, Satisfaction, and Interests survey
2. Employee injury and incidence reports

1. Employee Needs, Satisfaction, and Interests survey

These surveys collect information on employee demographics, health and health behaviors, job satisfaction, interests, and participation in work- and health-related programming. They also may assess employee attitudes about workplace and job health and safety, and social support from colleagues and supervisors. Presenteeism (i.e., health-related productivity loss) may be assessed too. Outside vendors may be sought for these types of surveys. Alternatively, some workplaces with in-house evaluation teams have created their own surveys through Survey Monkey (http://www.surveymonkey.com). Some organizations have used both—a more formal survey offered less frequently, and a "Survey Monkey" survey on an annual basis.

To address the SafeWell approach, these employee needs and interest surveys might include questions that examine OSH knowledge, attitudes, and behaviors of employees. The survey could also measure group phenomena such as safety climate and examine self-reported safety practices, injuries, illnesses, and other incidents (e.g. near-misses).

2. Employee Injury and Incidence Reports

The purpose of the incident investigation is to identify root causes of injuries and exposures. Those responsible for worksite occupational safety and health review incident reports for cause, and investigate appropriate follow-up actions. Incidents that meet the criteria as OSHA-recordable incidents prompt an investigation by a supervisor/manager and/or by those responsible for OSH at the worksite. The SafeWell approach supports a worksite environment that encourages employees to feel comfortable in reporting incidents and accidents.

Tools available from the field

MDPH's toolkit includes an employee-based Worksite Wellness Needs/Interest Survey: http://www.mass.gov/Eeohhs2/docs/dph/mass_in_motion/worksite_toolkit.pdf

Dartmouth-Hitchcock Medical Center uses an injury/exposure investigation form that is provided in Appendix 4.

Suggested enhanced SafeWell assessments for planning purposes: Environmental, organizational, and individual-levels

This section describes the part of Table 1 called "Enhanced Assessments." These assessments augment the basic level of assessments and are meant to be conducted in addition to those. This section aims to identify the value-added for augmenting the basic assessment list and is geared toward better-resourced healthcare organizations (the target of these Guidelines). As part of the planning process, these additional assessments will help to understand and improve further the health and well-being of the workforce and workplace. Consider choosing those most applicable to the worksite. Although discussed separately below, there is overlap between different surveys of the environmental and organizational levels.

Tools from the field

The American College of Occupational and Environmental Medicine has created the Corporate Health Achievement Award (CHAA) for organizations. As part of the application process, organizations are supposed to complete an on-line assessment process that adheres to standards of excellence in Occupational and Environmental Health Practice.

What it includes: The main categories assessed are leadership and management, healthy workers, healthy environment, and healthy organization. This self-assessment could be used as "one-stop

shopping" for an enhanced SafeWell assessment. The checklist covers OSH, WHP, and HR at the environmental/organizational and individual levels. Downloadable at http://sa.chaa.org.

What it lacks: In-depth analysis of psychosocial hazards at the workplace such as work scheduling and stress. Care will be needed in analyzing and planning to ensure that programs, policies, and practices are integrated across disciplinary silos.

The CHAA self-assessment may not be applicable to all organizations. The following is a detailed discussion of SafeWell assessments at the enhanced level.

Enhanced environmental level assessments

In addition to the basic level of assessments that organizations need to conduct to be in compliance with OSHA, there are specific OSHA standards and guidelines that are applicable to health care organizations. Exposure prevention and control plans for these topics can be augmented by walkthrough assessments tailored to the specific hazards at the worksite. As part of the SafeWell approach, consider assessing other opportunities to support worker health and well-being.

Following is a short list of suggested assessments at the environmental level—enhanced (basic level plus):

- NIOSH Guidelines for preventing slips, trips, and falls
- HSPH Center for Work, Health, and Well-being Patient Care Unit and Worker Safety walkthrough
- CDC Workplace Health Environment Assessment

Why conduct these assessments and what is the value added? Both OSHA and NIOSH have produced guidelines for injuries and hazards applicable to health care organizations. The NIOSH guide addresses slips, trips, and falls at the workplace and is described below. Developing prevention and control plans for the organization for these hazards improves the health and safety of employees and patients, as well as the organization's image in the community.

1. Improve the health and safety of employees, patients, and visitors

a. NIOSH Guide to Slips, Trips, and Falls: Injuries from slips, trips, and falls may occur to staff, patients, and visitors. Apart from the injuries related to them, such mishaps may result in lawsuits. Monitoring general housekeeping and keeping hallways free of equipment, boxes, etc., can reduce these hazards. Injury reporting forms help to assess the problem. NIOSH has developed a guide entitled "Slip, trip, and fall prevention for healthcare workers." http://www.cdc.gov/niosh/docs/2011-123/pdfs/2011-123.pdf

b. Harvard School of Public Health Center for Work, Health, and Well-being's (CWHW) Patient Care Unit and Worker Safety walkthrough

assessment: Prevention of Muscoskeletal Disorders (MSDs) is an important goal in the health care setting. One of the projects of CWHW has developed a walk-through environmental assessment that may be conducted to identify potential targets for prevention in a patient care unit. The tool may be requested from its author, Dr. Jack Dennerlein (jax@hsph.harvard.edu).

c. Center for Disease Control and Prevention's Workplace Health Environmental Assessment: The link below provides information about the physical environments at and nearby the worksite that can influence employee health and wellbeing. This includes assessing the workplace setting; communications about health, fitness, and nutrition environments; health and safety environment surrounding community; and direct observation of employees working. As may be seen, it utilizes an integrated approach. There are links to assessment tools for all of these topics. http://www.cdc.gov/workplacehealthpromotion/assessment/assessment_interviews/environmental-assessment.html

Enhanced organizational level assessments

As mentioned above, the purpose of organizational level assessments is to understand existing policies, programs, and practices that support, or compromise, worksite and worker health and well-being. They can also point to opportunities for collaboration within the organization. Some of the recommended assessments cover topics that are also included in either the basic level assessments (but in more depth) or in the environmental level assessments discussed above. Also included here is the topic of "violence prevention," which can be applicable to the health care setting.

Following is a short list of suggested assessments at the environmental level—enhanced (basic level plus).

- WellWorks-2 Occupational Safety and Health management program survey
- OSHA's Bloodborne Pathogen Standard
- Safe patient handling legislation by various States
- MSD Prevention
- OSHA's Ergonomic Guidelines for Nursing Homes
- Disability management and return to work
- OSHA's resources related to violence prevention
- JourneyWell's Dimensions of Corporate Wellness
- CDC "additional measures"
- Review of claims data
- Review of absenteeism data
- Review of program costs

Why conduct these assessments and what is the value added? As mentioned above, reviewing OSH, WHP, and HR policies, programs, and practices informs management of existing activities and opportunities for improvement, and points to ways to develop plans for an integrated approach to worker health. They also can improve the health and safety of employees, patients, and the organization's standing in the community.

1. To provide a more in-depth analysis of the OSH management program at the worksite.

a. WellWorks-2 Occupational Safety and Health management program survey

LaMontagne and colleagues tested an instrument for assessing OSH management programs that was developed from OSHA's 1995 Program Evaluation Profile.[5] It is a more in-depth program review than the one suggested in the basic level category. While developed for manufacturing worksites, it could be applicable to health care organizations as well. See reference for the instrument.

2. To conform with OSHA's bloodborne pathogens standard.

a. OSHA's Bloodborne Pathogen Standard

Bloodborne pathogens and needlestick prevention provides information about what is necessary to institute in the organization to prevent and control the likelihood of exposure from bloodborne pathogens and needlesticks. It includes requirements for recordkeeping.
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051
Also see: http://www.osha.gov/SLTC/bloodbornepathogens/index.html

b. Workbook for Designing, Implementing and Evaluating a Sharps Injury Prevention Program

The Centers for Disease Control and Prevention (CDC) has developed a *Workbook for Designing, Implementing and Evaluating a Sharps Injury Prevention Program*. It is designed to assist healthcare facilities to set up and evaluate sharps injury prevention programs, a significant component of the OSHA's Bloodborne Pathogen's Standard.
http://www.cdc.gov/sharpssafety/pdf/sharpsworkbook_2008.pdf

3. To prevent back injuries and other musculoskeletal disorders (MSDs)

a. Safe patient handling

Back injuries among health care workers from handling and transferring patients are endemic in health care organizations. Safe patient handling programs and policies are aimed at preventing back injuries among workers. Various states have implemented safe patient handling legislation (see example from the State of Washington below). OSHA has developed guidelines for nursing homes that are useful to consider for their

applicability in all health care organizations. OSHA has concluded that in addition to reducing work-related musculoskeletal disorders, facilities that use these guidelines may experience lower rates of staff turnover and absenteeism, and increased productivity and employee morale. In terms of assessment in this area, OSHA's injury reporting regulation (29 CFR 1904) required employers to record work-related injuries. These report forms can be analyzed periodically for trends in injuries, as well as to address problems early.
http://www.osha.gov/ergonomics/guidelines/nursinghome/final_nh_guidelines.html

Additional tools available from the field

Safe patient handling programs in healthcare settings are vital to prevent low-back injuries/ pain among healthcare workers. Many US states, such as Washington, have implemented safe patient handling legislation in hospitals. An assessment for safe patient handling from Washington is available at: http://www.washingtonsafepatienthandling.org/images/Swedish_Hospital_Risk_Assessment_Tool.pdf

An example of a vendor who provides a safe patient handling program is from Prevent, Inc.'s The "Get a Lift!" program. www.getalift.com .

The Centers for Disease Control and Prevention (CDC)'s Workbook for Designing, Implementing and Evaluating a Sharps Injury Prevention Program is designed to assist healthcare facilities to set up and evaluate these important programs. The workbook contains assessment information and is aimed primarily for infection prevention and occupational health personnel, healthcare administrators, and sharps injury prevention committees. http://www.cdc.gov/sharpssafety/pdf/sharpsworkbook_2008.pdf

b. MSD prevention

The Occupational Health and Safety Council in Ontario, Canada developed a toolkit on MSDs that includes risk assessments and guidelines for prevention programs. Worker participation in the assessment and programmatic phases is a key feature of this toolkit. Though not specifically targeted toward health care settings, its tools, checklists, and guidelines are adaptable. It is available on the Institute for Work and Health's (Ontario, Canada) website: http://www.iwh.on.ca/msd-tool-kit

4. To address disability management and return to work

a. ACOEM self-assessment

A parallel area to preventing MSDs is having a plan in place to manage absence from disability that may occur as a result of an illness or injury and to proactively support employees' return to work, including making job accommodations. As the American College of Occupational and Environmental Medicine (ACOEM) notes, disability management is broadening to include the identification of employees who may be performing poorly because of health issues and, in turn, find positive ways to decrease absences and improve their health and productivity.[6] Organizational policies and practices around work disability and absence management and return to work may be assessed. ACOEM's Corporate Health Achievement Award program has a self-assessment that includes checklists of program components and outcome measures in this area. http://sa.chaa.org

5. To prevent workplace violence

a. OSHA's resources on violence prevention

Violence and harassment at the worksite may occur frequently. OSHA states that violence in its most extreme form, homicide, is one of the top leading causes of all work-related fatalities.[7] As many health care organizations are open to the public, violence can occur from many different sources. There can be inter-staff as well as domestic violence which can enter into the workplace. While OSHA does not have a specific standard in this area, it does have resources on its website to help organizations develop violence prevention programs.
http://www.osha.gov/SLTC/workplaceviolence/

Included in the following link are sample security checklists and report forms:
http://www.osha.gov/workplace_violence/wrkplaceViolence.intro.html

6. To assess the organization's culture of health and alignment with best practices.

a. JourneyWell's Dimensions of Corporate Wellness

Based on NIOSH's *Essential Elements of Effective Workplace Programs and Policies for Improving Worker Health and Well-being,* JourneyWell (a health and wellness company) has developed a scorecard to assess the organization's status in providing effective programs for worker health. It is included in Appendix 5.

7. To conduct a more in-depth review of benefits, programs, and policies

a. CDC's "Additional Measures"

In its online workplace health resources, CDC includes a table of additional benefits, programs, and policies to consider assessing for a more in-depth understanding of the comprehensiveness of organizational support of worker health.
http://www.cdc.gov/workplacehealthpromotion/assessment/assessment_interviews/data-collection.html

8. To understand major health care cost drivers and health and safety trends

a. Employee record data

Review of employee record data can include health and worker compensation claims, absenteeism, short- and long-term disability reports, and on-site injury reports. Analysis of claims data is complex and time consuming, so consider whether to do it in-house or hire a consultant/company to help. The question of legal and regulatory requirements to ensure employee confidentiality and protection of personal health information will have to be addressed.

The organization's insurers probably already analyze these data in order to know how much to charge and may be willing to share it for free. They may also be interested in working together in an effort to reduce the claims and thereby the costs.

To use the claims data for making informed plans, the most salient findings need to be summarized and prioritized. Some questions to think about when doing this: What are the organization's most important challenges? What are the trends in claims data?

9. To assess current program costs and identify opportunities for cost-sharing

a. Program costs

This analysis might include a review of costs incurred for health and health and safety programming, as well as benefits. This analysis may help to identify areas where costs could be shared between departments or reduced because of duplication.

Enhanced individual level assessments

As mentioned above, the purpose of individual level assessments is to understand work and non-work factors that may influence the health and well-being of employees. In addition to a basic needs assessment of employees (see section on "Basic level assessments" above), many companies are interested in conducting Health Risk Assessments (HRA) which contain, at a minimum, a survey that assesses how the respondent may compare to meeting public health standards such as servings of fruits and vegetables, minutes of physical activity, and number of alcoholic beverages consumed in a day. HRAs may be supplemented with biometric screenings of items such as weight, blood pressure, and cholesterol levels. Focus groups with employees to discuss interests and/or findings from the HRAs are another method of gaining input and understanding into employee health, safety, and well-being. The discussion of these assessments is gleaned from a number of sources, including the Institute of Medicine's *Integrating Employee Health: A model program for NASA.[8]*

As with all individual-level assessments, confidentiality of employee input is important and needs to be communicated to employees. Employees may not participate in the

HRAs if they think their benefits or employment are at risk. If employees do not participate, desired results of the program may not be attained. Consider hiring an external consultant or vendor to assist with individual level assessments. This may reduce employee concerns about confidentiality.

In addition to the basic individual level assessments (see section on "Basic level assessments" above), following is a short list of suggested assessments at the individual level—enhanced (basic level plus):

- HRAs with feedback
- Biometric screenings
- Focus groups
- Individual interviews.

Which assessments are recommended, why conduct them, and what is the value added?

1. To identify health risks and provide tools

a. Health Risk Assessments (HRA) with feedback

HRAs allow employees to identify their health risks and often provide them with tools/counseling to improve their health. They also can provide base-line data about the health of the organization that may assist in priority-setting, program planning, and benchmark progress. HRA vendors can: deliver reports to the organization on aggregate health behaviors and risks, provide health coaching to employees, conduct follow-ups to track progress, and be integrated with health plan information to improve disease prevention and management.

A HRA usually consists of a survey which assesses and estimates an employee's risk of disease. In order to be effective in reducing risk, research has found that the HRA needs to have a feedback component. This means having an educational and behavior change component delivered to the employee as part of the HRA package. Vendors often provide these services as well either through health coaching, or on-line services.

As an important component of an HRA, the organization may consider including questions about stress-related issues at the worksite, other mental health issues, and measuring presenteeism. Presenteeism is productivity loss at work from health-related issues.

Tools from the field for HRAs

The National Business Coalition on Health has an online value-based purchasing guide that provides advice about HRAs. It is available with a free online membership at:
http://www.nbch.org/VBPGuide

The National Business Group on Health has a toolkit for employers interested in conducting HRAs. Employers need to be a member to access the full toolkit, but the following link explains its contents.
http://www.businessgrouphealth.org/benefitstopics/et_healthrisk.cfm

2. To motivate employees for health behavior change

a. Biometric screenings

Some organizations include biometric screenings as part of their assessment process. Screenings may include measuring weight, blood pressure, blood cholesterol levels, and carbon monoxide levels in exhaled breath.[9] When followed up with information about what their measurements mean in terms of risks, employees may be motivated to make health behavior changes or maintain healthy lifestyles. It is important to provide resources for employees to contact if their risks are high.

There are vendors who provide these types of services. Some health care organizations may be able to provide these services in-house too. Employee privacy and confidentiality should be assured during the screening process.

SafeWell developed a protocol for an integrated biometric screening for manufacturing companies that is applicable for areas of health care institutions that have exposure to carbon monoxide (e.g., loading docks, emergency room entrances, driveways with idling cars or buses, areas of the facility with certain types of machines running). It can also apply to home exposures related to faulty heating systems or other appliances that might emit carbon monoxide (CO). The biometric screening integrates OSH and HP in an analysis of CO in the exhaled breath. This screening addresses individual and environmental factors at work and home that may increase CO levels. It uses a breath test to measure the CO level in an individual's exhaled breath. It is quick, easy to conduct, and non-invasive. Smokers are often motivated to quit smoking if their results indicate a moderate to high level of CO in their breath. Moderate to high levels of exposure among non-smokers can prompt investigations into work and home sources of their exposure. There is a full description of a sample program for this screening in Appendix 1: Program B in Chapter 3.

3. To provide in-depth information on a specific topic of interest to the organization

a. Focus groups

Focus groups can provide in-depth information on a specific topic of interest to the organization. They may be used to gather information about needs, concerns, and interests of employees and managers at the worksite.[10] For instance, a focus group might address health and safety concerns of nurses on a medical-surgical floor, or

concerns of managers and employees about deployment of a proposed HRA. Findings may facilitate planning efforts.

Focus groups are group interviews on a specific topic run by a moderator. S/he asks open-ended questions to generate an in-depth conversation and avoids questions that produce short answers.

An ideal focus group consists of 6-8 participants, but even as few as 4 participants in a focus group can generate an informative discussion. Focus groups with more than 10 participants tend to become more difficult to manage. One of the benefits is gaining knowledge from a number of people at the same time. On the other hand, some issues may not be discussed if individuals are not comfortable with raising them in front of other people/co-workers.[10]

When recruiting the focus group participants, it is good to target a group with similar characteristics (e.g., occupation) and common experience (e.g., occupational injury, smokers). Focus groups require more time and resources than surveys. The findings from the focus groups are not generalizable to the entire workforce; they are representative of the individuals who participate.

So that all levels of employees feel free to discuss their concerns, consider hiring an outside consultant/vendor to conduct focus groups.

4. To provide employee input and recommendations

a. Individual interviews with employees

Individual interviews with employees may produce additional insight and understanding to existing worksite hazards and injuries. Since employees are the ones most familiar with the work they do, they can provide input on existing procedures, and make useful recommendations for change.

Individual interviews are one-on-one, face-to-face discussions where the interviewer asks the same set of questions to one person at a time.[10] For instance, employees are asked what their concerns are about the workplace environment, their health, and their job. This type of method can provide more in-depth and nuanced information than a survey. The interview process takes more time and resources than a survey, and different types of information would be obtained. It is recommended that individual interview questions are open-ended rather than questions that produce “yes” or “no” answers. A challenge is how to analyze the open-ended data. Therefore, it is recommended that interviews are recorded and typed transcripts produced from the recording to enable an accurate review and analysis of the data. It is important to interview a range of people who represent all the important worksite stakeholders. The SafeWell approach suggests interviewing employees from different departments and representing all levels of employees. Recognize that the information collected is not necessarily generalizable to the entire employee population.

So that all levels of employees feel free to discuss their concerns, consider hiring an outside consultant/vendor to conduct these interviews.

See Appendix 6 for suggested questions on safety and health for the employee interviews.

Steps in choosing the health assessment

There are many items to consider when choosing which health assessment to use. Associated costs, content, and potential outcomes need to be weighed. The first step is to clarify goals. Another important step is to decide whether an outside vendor will be used to conduct assessments or whether they will be done "in-house." For thoughts on choosing a vendor, see "Consider whether to use a vendor to conduct assessments and program activities" above.

Framer and Chikamoto have developed a "Health Assessment (HA) Program Checklist"[9] that lists a number of items to consider in choosing an appropriate health assessment. It is geared mostly towards health promotion programs, so some safety and health topics are added here. It is also geared toward choosing a health assessment at the individual employee level. While many of the topics also apply to environmental and organizational level assessments (e.g., goals and buy-in, program review, reports), it would need to be adapted for topics that are specific to those areas (e.g. review of physical facilities, review of management systems and organizational policies).

1. Goals and buy-in

- Clearly define the goals of the SafeWell program (see "Decide about goals and priorities" above)
- Share the goals with representatives of management, union (if applicable), employees, and the vendor (if applicable)
- Obtain buy-in from all levels of management, employees, and union (if applicable).

2. Assessment and related program review

- Assessment contents and method:
  - Does the assessment include measures that align with the goals?
  - Are there questions related to the health outcomes of the population (e.g. low back pain for patient care assistants)?
  - Are there questions about a wide variety of health behaviors, stress, and participation in organizational programs?
  - Are health and safety questions included?
  - Are the questions easy to understand and answer? Consider piloting an assessment with a group of employees representing the different populations of the organization to see if they understand it.

- How long does it take to complete? Framer and Chikamoto recommend it be less than 20 minutes. Those that are 7-10 minutes increase participation but may not be comprehensive.
- How will it be conducted and accessible to all employees? Consider all shifts (if applicable) and all employees, some of whom may not have access to or capability with computers. Consider different modes (e.g., computer, paper and pencil) if necessary to improve participation.

3. Employee reports/feedback

- Ask to see a sample report from the vendor (if using a vendor), or plan to create one. Consider the following:
  - Are the recommendations in it current with scientific literature? Ask the vendor how often they update the science in their assessment and program.
  - Is the tone in the report and the feedback material appropriate for organizational goals and the motivation of employees?
  - Do the recommendations to employees align with resources available to them at the worksite or in the community? Is the organization willing to include additional resources for employees that are included as recommendations?
  - Is the report visually appealing?
  - Is the reading level and language appropriate for employees?

4. Aggregate reports to management

- Ask to see a sample report from the vendor (if using a vendor), or plan to create one. Consider the following:
  - Does the vendor have a process for eliminating any identifying information in the aggregate report?
  - Are the measures used and presented by the vendor aligned with organizational goals?
  - Will the report compare the organization's results with national, state, or industry figures?
  - Can a cohort of employees who remain at the organization be tracked so that results show the impact of programs on existing employees over time?
  - When and how will the reports be presented to management? Will there be a chance for review and editing before the final is delivered?

5. Eligibility for participation

- Determine who is eligible for participation, and consider the following groups:
  - Full-time/part time
  - Employees/contractors
  - Employees/dependents
  - Retirees

Part of the decision about who is eligible will depend on organizational goals and priorities. If health care cost reduction is a main goal, consider including anyone on the organization's health insurance program. If it is to reduce absenteeism, consider including all employees and contractors.

6. Program delivery method

- Determine how to deliver program. Although this item may seem unrelated to the assessment process, in the case of HRAs with feedback, the way a program is delivered to employees is also an important consideration. If the program is delivered over a computer or by phone, and employees don't usually access computers or phones, then participation in the assessment as well as the program may suffer. Areas to consider are:
  - Will the program be available to employees on work time, only off work time, or both? If it's available off work time, how many hours a day will employees have access to it?
  - Will the program be delivered in person, or by a health coach over the computer, or by phone?
  - If a person is not delivering the program, are different ways to access information available? For instance via computer, or by hard copy for those who are not comfortable with, or who do not have access to, computers?

7. Communications about program

- Communicate about the program to the multiple populations in the organization.
  - What are the best communication mechanisms to reach all employees (e.g., flyers, e-mails, announcements at meetings)?
  - What are the messages the organization wants to convey to employees about the program?

8. Biometric screenings

- Review procedures and qualifications for screening
  - Are the procedures scientifically valid and reliable?
  - How will biohazardous waste be eliminated?
  - Are staff properly credentialed, trained, and monitored?
  - How will results be communicated to staff?
- Communication about screening
  - Have employees been communicated with about preparing for the screening, if necessary (e.g. fasting requirements for blood draw for glucose testing)?
  - Are screening times convenient for staff to adhere to requirements (e.g. beginning of a shift if fasting is required)?
  - Have staff been apprised of how information will be kept confidential?
  - Are potential risks of the screening been communicated to staff?

- Confidentiality and legal issues
  - Have appropriate accommodations been secured in which to conduct the screenings and provide feedback on results to staff?
  - Have HIPAA regulations been reviewed, and staff who come in contact with personal health information trained about the handling of data?
  - Have preparations been made for any emergency that might arise and has legal counsel been consulted about potential liability issues?

9. Implementation monitoring

- Monitoring the process and making mid-course corrections if necessary:
  - Is the health assessment accessible to employees as planned?
  - Are screenings occurring on schedule?
  - Have problems arisen that need to be addressed and is there a process for doing so?

10. Evaluation

- Discussing the results and planning for the future:
  - To whom will results be provided to and in what format?
  - Will results be tracked over time?
  - What will next steps be?

Further recommendations on collecting the data

These guidelines have focused heavily thus far on what kind of data to collect. In addition to considering *what* to include in the assessments, as part of the SafeWell planning process it is important to consider coordinated and systematic approach to data collection, and *who* will collect it.

Suggestions for a coordinated and systematic approach to data collection

1. Consider a coordinated approach

The employee health surveys, health and safety walkthroughs, and HR benefits and policy assessments are often conducted independently by different departments, with minimal chance of addressing workplace health in a comprehensive fashion. A more coordinated approach that has a team of individuals representing the different departments discussing which data to collect may lead to both a reduction in duplicate efforts and interdepartmental collaboration that spills over into implementing the program. Here is an example from the field.

Deployment of Dimensions of Corporate Wellness

A coordinated approach to assessments can have many benefits, including the building of collaborations that go beyond the assessment process. This pleasantly unexpected outcome was

found in the recent deployment of an assessment scorecard called the Dimensions of Corporate Wellness that is being piloted by JourneyWell (www.journeywell.com). The scorecard is based on NIOSH's Essential Elements and guides organizations in reflecting upon how congruent their practices are with the Essential Elements. Employer groups are asked to complete the scorecard and discuss the results as a group. JourneyWell has found that the process of completing the scorecard with representatives from different departments has led to collaborations between departments in addressing worker health in a coordinated manner.

2. Consider a systems-approach that collects data consistently

It is important to establish systems that collect data in consistent ways over time. Part of setting up such a system would be to determine what type of information to collect and how often. This can be driven by organizational priorities. It is helpful to have a long-term view of this process. As part of the SafeWell approach, consider collecting data on the work environment, organizational policies, and individual health risks into a coordinated system. Such coordinated data systems can contribute to the design and evaluation of programs and policies, and may help to identify current strengths and resources, as well as gaps and limitations of the organization. They can help with monitoring progress and inform the need for mid-course corrections. Developing a fully integrated data-based approach to planning will ensure that the programs and polices are integrated and coordinated across organizational systems. This approach may be more appropriate for organizations that are well-resourced and have a long-term commitment to using the SafeWell approach to worker health.

- A useful reference for setting up an integrated data and health management system is the Institute of Medicine's *Integrating employee health: A model program for NASA*. Washington, DC: National Academies Press, 2005.
- The National Business Coalition on Health also addresses integrated data systems at: http://www.nbch.org/Foundational-Business-Diagnostics-Introduction

3. Consider providing paid work time for completing assessments

This will reduce employee barriers to participate. However, it is important to secure management (and union, if applicable) alignment with this procedure beforehand. Top leadership may want to hold managers accountable for their employees' participation in the assessment process, and to stress the importance of participation to organizational goals and objectives. This may be difficult for time-sensitive tasks or emergency-related occupations. Discussions with managers and employees about how it might be best accomplished are warranted.

Challenges and tips from the field

Challenge*:* Obtaining paid time to do assessments

Tip: *S*taff responsible for the SafeWell program will explain to top management that allowing employees to complete assessments on work-time greatly increases their participation. If there are low participation rates, the information received may not be representative of the worksite, and programs may not be relevant to employees. That means the money that management has allocated to employee health and well-being may not be wisely spent.

If top management agrees to conduct assessments on work-time, work with all supervisors to assure their support. Address any concerns they might have *before* the assessment process begins.

4. Consider providing incentives

Research shows that providing financial incentives increases employee participation in HRAs, especially when partnered with intense recruitment efforts.[8] When considering incentives, Van Wormer and Pronk note that two core principles are most important: value and contingency.[11] A good incentive needs to be of value to members of the organization. One way to determine what is of value is to ask employees, pilot test the incentive, and then observe how it works.[11]

One type of incentive is usually provided to a large group of employees, such as cash, health insurance premium discounts, and gift cards. The value needs to be of a large enough magnitude to motivate employees to take the survey to obtain the incentive, but not so large that they feel coerced into participating or that it takes away from their intrinsic motivation to behavior change. It is important that the incentive is contingent upon the employee completing the survey and is received as close to the survey being completed as possible.[11] Incentives should be factored into the original budgeting process, and can run from $50-$400 per employee. Research by the Integrated Benefits Institute of more than 500 employers found that about 50% of employers respond they spend more than $200 per participant per year on incentives, and more than 20% of employers spend more than $400.[12] The average amount spent by large employers in another study of major US employers was $192 per person per year.[13]

However, when addressing the OSH components critical to SafeWell, Sorensen and Quintiliani add an additional principle: Consider and prevent unintended consequences of incentives.[14] The use of incentives to reduce accidents must not result in decreased accident reporting. Also, incentives should not inappropriately burden employees when employers have the responsibility to provide safe work environments.

Note from the Field

Dartmouth-Hitchcock Health Care (D-H) in New Hampshire was interested in increasing its response rate to its health assessment. In 2009, the response rate was 11%. D-H took two major steps to increase the response rate:

1) Provide financial incentives

2) Use social marketing techniques on its on-line benefit enrollment system to encourage employees to choose to participate. The financial incentive included a $200 tax-free reduction in health care premiums if employees attested that they had/would take the health assessment; an additional $50 if they attested they were non-smokers or would participate in a D-H smoking cessation program; and an additional $50 if they attested they had/would get a flu shot. Employees would be eligible for a $300 financial incentive if they participate in all three parts.

As a result, in 2010 participation in the health assessment grew to 65%.

Suggestions on who to collect the data

Another important component to consider is: *who* will collect the data?

1. Evaluators and vendors

Some workplaces may have in-house evaluation teams that can collect and analyze the data. It may be worthwhile also to consider having an outside evaluator help with the assessment and evaluation process. Vendors that provide worker health services and programs, including health plans, may collect data for the organization. If outside vendors and health insurance plans collect and analyze data, they might provide the client with aggregate information. It may be useful to bring these vendors and/or evaluation teams together in a meeting to discuss the organization's goals in collecting and reporting on data. That way each will know the organization's expectations and the vendors' roles in contributing to the planning process. It may also reduce duplicative efforts.

An advantage of having an outside evaluator is that there may be less bias in the results. External evaluators have less investment in the outcomes and can be more objective than internal staff might be.

Another important reason to have outside evaluators/vendors conduct and lead the assessment process is to reduce employee concerns about confidentiality. A message may be communicated to employees that all their input will be confidential, and that management will only receive information at the aggregate level. More information on

choosing vendors is included above in "Consider whether to use a vendor to conduct assessments and program activities."

2. Employee input

To increase employee and manager buy-in to the assessment process, consider how they might participate. The planning committee (discussed in "Chapter 1: Providing the foundation") might include different levels of employees who may provide input on what kinds of data and information are collected. They have the best knowledge of problems at their worksite and may offer great suggestions for change and improvements.

Communications about data collection

Communication with all levels of employees is important in the data collection process, whether the organization has conducted assessments before or not. As mentioned in "Chapter 1: Providing the foundation," CDC recommends developing a communications plan for implementing health promotion programs, and this may be extended to the data collection process as well. Here is the link to CDC's communications planning section of its workplace health program:
http://www.cdc.gov/workplacehealthpromotion/planning/communications.html

It is important for employees to know:

- Purpose of data collection
- When it is going to occur
- How long it will take
- All assessments are confidential
- When they will hear results

Consider involving different levels of employees in some of the communications and decisions about the data collection process. If a thoughtful communications plan is implemented, it may increase participation and quell any myths that may circulate about the process. If there are concerns or problems with the process, having employees from different levels involved may inform program organizers of issues that might be addressed subsequently. Similarly, those employees may help to spread the word about how concerns/problems will be addressed. For instance, some employees might believe that if they complete the HRA truthfully they might lose their job or their benefits might cost more. An effective communications campaign would emphasize that all data are confidential, will only be summarized on the aggregate level, and that no one will lose their job because of completing an HRA. If an outside vendor is used to conduct the HRA, employees may be told that only aggregate-level information will be shared with the employer. Some companies have used informed consent forms to relay this information. See the "Note from the field" below regarding a communications campaign about conducting health risk appraisals, including biometric screenings (e.g., weight, blood pressure, cholesterol)

Note from the field: Communicating about individual level assessments

When an occupational health nurse was hired to run health promotion activities at the Dartmouth-Hitchcock Community Group Practices in Southern New Hampshire, one of the first main activities was to field a health risk appraisal and biometric screenings of all employees. Recognizing that this was a daunting task for someone new to the organization, a number of steps were followed to communicate about the assessments that would be launched, including:

Meeting with main leaders and managers in the different clinics to tell them about the assessments and discuss barriers to conducting them and who could help from each division

Taking the survey and undergoing the biometric assessments to provide first-hand knowledge about what was being asked of others

Making formal presentations to all managers that focused on the health care costs in their divisions

Conducting the same presentation to employees in the divisions, including a slide that employees were to have 1 hour of work time to complete the assessments

Meeting with lots of people during this process to discuss it and allay concerns

Developing a website and newsletters about the assessments

This story from the field highlights a couple of important points regarding communication. First, having a communication plan that is targeted at different groups of employees and discusses the assessment is an important component to successful field implementation. Secondly, while one person may have led the assessment process, the buy-in and engagement of management and employees was important to implementation.

Challenges and tips from the field

Challenge: Employees may be reluctant to complete an HRA because of their fears of repercussions.

Tip: Provide information on how the confidentiality of all responses will be protected. This may include contracting with outside vendors to collect and analyze the data, reporting only on

aggregate results, assuring employees through communications vehicles that they won't lose their jobs or benefits because of truthful responses.

Challenge*:* Employees are not participating in the HRA

Tip: There may be many reasons why employees are not participating that may be related to lack of communication and understanding, or because of poor support from middle managers. Talk to employees to discover their concerns and address them. For instance, if managers are not encouraging employees to take the HRA, talk with managers and instruct them as to how the effort ties in with company goals. Another idea might be to provide a communication from top management about the importance of participation in the effort.

Some companies have tied an HRA with new employee orientation. Others have provided incentives, such as money or a gift card for completion, or reductions in health insurance premiums tied with completion and program participation.

Analyzing the data to inform the planning process

Once assessment tools have been chosen and data collected, the findings need to be analyzed and a report created that can be distributed and communicated to worksite stakeholders. Analyzing the data will be more focused if questions to be answered have been developed up front. See "Decide about goals and priorities" earlier in this chapter for purposes of data collection to help focus the review.

Consider who should be involved in the analysis. In part this depends on who was involved in collecting the data. If an outside vendor is collecting and analyzing the data, it is still critical for company personnel to be involved in requesting the type of information and format of the report. If data are collected and analyzed in-house, the broadest understanding will be reached by including representatives of different departments and types of employees. In any case, for the SafeWell approach, pull together representatives from human resources, occupational safety and health, and wellness departments to discuss findings.

Synthesis: What do the data show

There are three major tasks to analyzing and synthesizing the data:

- Analyze the assessments
- Identify strengths, weaknesses, and trends
- Develop list of recommendations and priorities based on goals and findings

Convene the planning group (see Chapter 1 for descriptions of the Steering Committee and/or working groups) to review the analyses, interpret the findings, and discuss what actions to recommend. A summary of the assessments should be prepared and distributed before this meeting. While strengths, weaknesses, and recommendations may be drafted before the meeting, these items will benefit from richer discussion with representatives from human resources, occupational health and safety, and wellness departments.

Focusing and analyzing the assessments using the SafeWell approach

This is the point at which goals that were developed during the assessment phase are addressed. Focus on data that will help reach these goals; identify the current status of programs, policies, and practices that are important to the goals; help make priorities; and inform program planning.

Analyzing the data is not just about crunching numbers, it provides an opportunity to determine what topics to highlight in a summary of the data to provide to worksite stakeholders.[15]

Some questions to consider answering in the summary include:

- What are the major health, and health and safety issues affecting employees now and over time?
- What are the main drivers contributing to health-related costs?
- What are the main health and health and safety concerns of employees?
- What groups of employees are at-risk? How is risk differentiated across employee groups?
- What are the organization's biggest challenges?
- What organizational and system factors influence employee and worksite health? What optimizes health? Where are the barriers?
- Do the management systems support the SafeWell approach to workplace health? For instance, do benefits and other programs and policies provide an environment conducive to work-life balance? Are data systems integrated so that information about health costs, absenteeism, and occupational injuries can be tracked and correlated?
- If a health care organization is accredited by the Joint Commission, have its reporting requirements been included?

Tools from the field to analyze evidence

There are existing tools that outline what to think about when summarizing or analyzing all the workplace evidence gathered. They focus on health promotion programs, so information about benefits and health and safety could be added to adhere to the SafeWell approach. Unfortunately, an integrated analysis tool has not been found.

- The Massachusetts Department of Public Health's worksite wellness toolkit has a sample form for summarizing data, starting on page 62 of the following link http://www.mass.gov/Eeohhs2/docs/dph/mass_in_motion/worksite_toolkit.pdf
- Another tool, from CDC's SWAT, provides a listing of items that will provide direction to a comprehensive workplace health program: http://www.cdc.gov/nccdphp/dnpao/hwi/downloads/swat/SWAT_interpretive_asessment_checklist.pdf
- While there may not be one tool that analyzes and compiles health and safety findings, organizations' injury and incident logs, workers' compensation claims runs, and job hazards analysis will provide this information.

Identifying strengths and opportunities

The assessment phase will undoubtedly show areas of strength and areas for improvement. It is important when identifying these areas to address them at multiple levels. For instance, give similar focus to identifying strengths and opportunities in the work environment, health promoting environment, organizational policies and systems, as to employee health risks.

Frame the strengths and opportunities in a way that will support efforts to implement a comprehensive approach to workplace health. For instance, what systems currently exist to coordinate policies and practices across Human Resources, health promotion, and health and safety? What systems need to be put into place to achieve this?

Developing a list of recommendations and priorities

The planning committee can develop a list of recommendations that it will circulate to workplace stakeholders for discussion and engagement. These will include priorities for the ensuing programs. When thinking generally about making recommendations and priorities, consider the following points:

- Identify priorities that a worksite program could change
- Identify priorities that are important to the organization and a wide range of its employees
- Choose priorities that can be turned easily into programs in which employees can and want to participate
- Make short-term and longer-term recommendations
- Consider resources available
- Consider costs and benefits

For the SafeWell approach consider including recommendations that:

- Develop or strengthen systems to integrate data, programs, and policies of the human resources, occupational health and safety, and wellness departments
- Consider ways of allocating budgets and conducting programs that coordinate and integrate activities across departments

- Implement data management systems that continue the measurement and analysis of key priorities as well as worksite health and OSH performance indicators
- Suggest programs, policies, and practices that influence health and contain components of health promotion, occupational health and safety, and work-life balance
- Address multiple levels: the work environment, management and organizational systems, and employees and their families

Preparing and communicating findings and recommendations

Different stakeholder groups within the organization will be interested in the findings of the assessment phase. However, the depth of information they may be interested in may vary. Consider multiple documents or communication venues for distributing the findings of the report.

Communicating the findings and recommendations are part of the campaign to engage all organizational stakeholders, so it is important to tailor communications appropriately for the different audiences.

- Top management will probably be more interested in a condensed report (think Executive Summary), with costs and benefits outlined clearly.
- Managers involved with implementation may want more details and implementation considerations.
- Employees may want to know how the program will change their working environment and availability of resources for them and their families.

CDC's Workplace Health toolkit has a useful outline of the types of information to be considered for an overall report, and it is applicable to the SafeWell approach. The original components of CDC's report are available at: http://www.cdc.gov/workplacehealthpromotion/assessment/reporting/index.html

The outline for reporting findings and recommendations may be adapted from the CDC outline just mentioned. Appendix 7 of this chapter includes a sample outline adapted from the CDC outline. Also, the information will need to be distilled for the various stakeholder groups. It is important to cover the goals of the effort, as well as the process used, both for the assessment phase and the development of the recommendations. Describe who was involved, what type of information was gathered and reviewed, and how recommendations were developed.

Communicating findings and recommendations: The SafeWell approach

It is important to discuss findings about the worksite environment, organizational policies and practices, and aggregate-level data about the workforce. Communicate how the organization operates in relation to the SafeWell approach. Do departments address worker health in silos? Or do they work together? In the recommendations section,

suggest ways that departments may work together and barriers and opportunities that exist for collaboration.

Designing a plan

This section outlines a sample program plan and additional key considerations in program planning, and provides additional resources for sample plans.

Developing the plan

There are a many models for developing the actual plan that all share some common components. The steps outlined here are adopted from a training manual on Designing the Age Friendly Workplace© produced by the University of Washington.[16]

The plan includes choosing:

- Priorities
- Measurable objectives to meet priorities
- Measures to track progress
- Person(s) accountable for implementing the steps,
- Timeline/due dates for completion
- Specific steps to address the objectives
- Barriers and facilitators to completing the plan and how to address them.

The SafeWell approach additionally encourages consideration of:

- Linkages that could be made across systems/departments to help achieve each priority
- Costs and ways that different departments could help defray costs
- Address environmental/organizational level as well as individual level objectives where possible

Please see below for a sample program plan to reduce back injuries.

Sample program plan

Using the University of Washington's format, the following is an example of a program plan that has as its priority to reduce back injuries.

Priority: Reduce back injuries

Measurable objective: Reduce the number of back injuries at work by 10% in the Orthopedics Department in 1 year.

Measure: Baseline measure will be the number of back injuries from the Occupational Hazard and Injuries Report Form (e.g., Appendix 4) in the Orthopedics Department at the start of the program.

Steps to achieve objective (each step will have sub-steps):

Organizational/environmental levels:

- Institute safe patient handling (SPH) policy and procedures
- Install SPH equipment
- Institute other ergonomic programs and policies
- Instill supervisor support of staff break-time
- Instill supervisor support of physical activity
- Provide benefits through HR for gym memberships
- Make walking trails and stairwells attractive
- Provide areas for stretching
- Consider cross-departmental sharing of costs

Individual level:

- Train staff and supervisors in SPH
- Communicate to all employees ways to reduce back injuries at home and at work
- Instill co-worker support of break-times
- Instill co-worker support of exercises to strengthen backs

Who is responsible: The program lead is the Director of OSH. S/he will be assisted by a team including: an OSH nurse, the Nurse Manager on Orthopedics, a nurse champion from Orthopedics, the Wellness Coordinator, an HR representative for benefits, and the communications representative for the SafeWell program. Including these members will assist in making linkages across departments.

Due dates: The overall deadline is 1 year from inception of the program. Each step will need to be outlined with its corresponding due dates.

Challenges to completing the plan and responses

Challenges	Response
Cost	Combine budgets from OSH, WHP, and HR
Taking breaks	Develop break schedules, Supervisors can encourage employees to take their breaks. Co-workers can encourage each other to take breaks.
Getting supervisor and nurse buy-in	Involve the nurse manager in planning. Identify a nurse champion from the floor to assist in planning and implementation.

Additional considerations in planning

Two final important considerations in planning are to show organizational support and commitment to it; and to communicate widely about the plan to the entire worksite population.

Organizational support and commitment

Consider:

- Having someone in senior leadership lend his/her support to the specific plan (e.g. by attending a planning meeting, announcing to the worksite his/her support of SafeWell program activities)
- Providing resources for implementation of it
- Designating officially a committee or coordinator(s) to lead the planning and implementation process.

Communications about the plan

As it was important to communicate about the assessment phase, it remains important to communicate about the development and implementation of the plan. Include topics such as:

- Who was involved in developing priorities?
- Who was involved in developing the plan?
- Who is responsible for planning and implementation?
- How long will the program last?
- Who is eligible to participate?
- What are the priorities to be targeted?
- How the organization will address the priorities?
- How will the priorities be measured?
- How will the program be evaluated?

Tools from the Field

The following resources contain more information for developing program plans. Computer software for program management also exists and can help track progress toward goals.

Centers for Disease Control and Prevention:
http://www.cdc.gov/workplacehealthpromotion/planning/index.html and
http://www.cdc.gov/workplacehealthpromotion/planning/action_plan.html

University of Washington:
http://www.agefriendlyworkplace.org/workshop.html

Commission on Health and Safety and Workers' Compensation:
http://www.dir.ca.gov/chswc/WOSHTEP/Publications/WOSHTEP_TheWholeWorker.pdf

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Appendix 1: Selecting vendors: Topics and questions[1]

The following table is a summary of potential topics and questions developed by Kruse to consider when selecting a vendor for evaluation or programs.

Topic	Questions
Customer Service	How quickly are questions answered? How much does the vendor support implementation and delivery process? How are complaints handled? Will there be a designated person assigned to the account? Are there hidden costs? What is the turnaround time on reports and documents?
Experience	What is the average number of years staff has been involved in programming? How many clients does the vendor work with in a year? How long has the vendor been in business? Does the vendor have subcontractors that deliver part of their services? What are staff credentials? How is field staff trained? Are there customer satisfaction statistics on staff performance?
Confidentiality and Liability	Is the vendor HIPAA compliant? What processes are in place for handling and storing personal information? How does the vendor handle communication of personal information at screenings to ensure confidentiality? How does the vendor transmit personal information?
Satisfaction (participant and customer)	What type of participant satisfaction documentation does the vendor have? How satisfied have other clients been with performance?
Metrics and evaluation	What kind of evaluations does the vendor provide for the program?

	Will the vendor work with other vendors, insurance brokers, and others to integrate information?
Account management	What is the account manager's experience? How much guidance does the manager provide? Who supports the manager?

Adapted and summarized from Kruse, Mary M. "From the basics to comprehensive programming" in ACSM's Worksite Health Handbook: A guide to building healthy and productive companies. 2nd ed. Pronk, N (ed). 2009. Champaign, IL: Human Kinetics, pp. 296-307.

Appendix 2: Example of a baseline occupational safety and health audit and compliance form

This is an example of a baseline occupational safety and health audit and compliance assessment for a healthcare organization that contributes to a safe environment of care for staff, patients, and visitors. The tool has been developed and implemented at the Dartmouth-Hitchcock Medical Center, Lebanon, NH. Permission to include it has been granted by Lindsey Waterhouse at Dartmouth-Hitchcock, the collaborator on the development of these guidelines. It is to be completed by an occupational/environmental health professional and can highlight strengths and areas for improvement. It is to be complemented by walk-through assessments of the physical environment, tailored to a particular worksite.

Occupational Health and Safety: Auditing and Compliance

The following questions are intended to obtain basic information and understanding of the scope of organizational programs contributing to a safe environment of care for patients, visitors, and staff. Requested information is based upon regulations and standards developed by the following organizations:

- Occupational Safety and Health Administration (OSHA)
- US Environmental Protection Agency (EPA)
- National Fire Protection Association (NFPA)
- New Hampshire Dept of Labor and Dept of Environmental Services (NH DOL/NH DES)
- Joint Commission on Accreditation of Healthcare Organizations (JC)
- Centers for Disease Control (CDC)

Location-specific information:

Name of facility:_____ Contact phone #:

Facility type _____ Occupancy:

Date of construction: _____ Owned/leased:

Primary Activity Description:

1. **Safety Management**" The organization has established committees and processes to address occupational health, safety, and environment of care issues:

a. A committee or working group exists that is responsible for the review and oversight of occupational health and safety activities at the organization.
   Yes No NA

b. A person has been designated to act as the organization's health and safety officer or representative.
   Yes No NA

c. Safety Surveillance is conducted of all patient care locations every six months and non-patient care areas annually.
Yes No NA

d. A procedure exists to facilitate staff reporting of occupational injuries and illnesses, accident investigation, worker's compensation, and compliance with OSHA injury tracking requirements.
Yes No NA

****

2. **Environment of Care or occupational health and safety plans** exist to address operational hazards and employee exposures.

a.	Environment of Care Plans:	Yes	No	NA
i.	Safety Management Plan	Yes	No	NA
ii.	Security Plan	Yes	No	NA
iii.	Hazardous Materials and Waste	Yes	No	NA
iv.	Fire Safety Management Plan	Yes	No	NA
v.	Medical Equipment Management Plan	Yes	No	NA
vi.	Utilities Management Plan	Yes	No	NA

b. Emergency Management Plans adequate to support organizational hazard vulnerabilities

i.	Fire Response Plan	Yes	No	NA
ii.	Bomb threat plan	Yes	No	NA
iii.	Workplace violence	Yes	No	NA
iv.	Building evacuation	Yes	No	NA
v.	EMS reporting and response	Yes	No	NA
vi.	Power/IS Out Plan	Yes	No	NA
vii.	Severe Weather Plan	Yes	No	NA

c.	Hazard Communication Program	Yes	No	NA
d.	Bloodborne Pathogens Safety	Yes	No	NA
e.	Personal Protective Equipment	Yes	No	NA
f.	Respiratory Protection	Yes	No	NA
g.	Compressed Gas/Cryogen Safety	Yes	No	NA
h.	Medical Surveillance	Yes	No	NA
i.	Laboratory Safety	Yes	No	NA

j. Radiation Safety (Ionizing and Non) Yes No NA

k. OSHA Occupation Specific Programs and Policies

i.	Electrical safety	Yes	No	NA
ii.	Confined Space Entry	Yes	No	NA
iii.	Lock Out/Tag Out Safety	Yes	No	NA
iv.	Fall Protection	Yes	No	NA
v.	Shipping/Receiving safety	Yes	No	NA

****

3. **Construction Safety** - Plans or procedures are in place to address the impact of construction and refurbishment activities on the care environment.

a. A process is in place to ensure contractors will conduct their work safely with minimum impact on patient care and employee activities. Multi-employer worksite conditions apply.

Yes No NA

b. An Interim Life Safety measure is implemented when life safety systems may be impacted due to construction?

Yes No NA

c. An infection control risk assessment is completed before each project to define the potential for impact on patient care activities?

Yes No NA

****

4. **Control of hazardous substances** - Procedures and processes are in place to ensure the control of hazardous substances:

a. The organization obtains and uses hazardous materials. This may include medications, pharmaceuticals, chemotherapy, and radioisotopes.

Yes No NA

b. A process is in place to collect and characterize potentially hazardous waste to ensure proper collection, storage and disposal.

Yes No NA

c. This location generates potentially infectious materials and medical wastes.

Yes No NA

d. Cleaning products have been selected so as to be effective to clean and sterilize the facility while minimizing the hazard to housekeeping staff, employees and patients

Yes No NA

e. Procedures are in place to properly collect waste sharps, tissue, blood and body fluids for proper disposition.

Yes No NA

f. Procedures are in place to collect, store and dispose of Universal wastes.

Yes No NA

g. Procedures are in place to collect and recycle solid wastes (paper, cardboard, food and drink containers

Yes No NA

h. Procedures are in place to collect and dispose of putrescible garbage at the end of each day.

Yes No NA

i. The facility contains special contaminants that could expose staff and contractors if not properly identified and controlled (Examples include – asbestos, lead paint, mercury, or polychlorinated biphenyls).

Yes No NA

****

5. **Staff education and training -** The following procedures exist to educate and familiarize staff regarding the hazards associated with their environment and work activities.

a. There is a process in place to orient new employees on organization health, safety and emergency response procedures.

Yes No NA

b. Within 30 days of employment, new staff receive information and education on the hazards and required actions to accommodate the hazards present within their workplace.

Yes No NA

c. A procedure is in place to assess and ensure employee knowledge and understanding of organization and departmental safety, health and emergency management procedures.

Yes No NA

6. **Fire Safety Management.** The following actions are taken to ensure staff, patient and visitor safety in the event of fire.

a. A site specific fire response plan has been developed and available for review.

Yes No NA

b. Fire drills are conducted periodically (at least annually) based upon facility occupancy type and staff competency.

Yes No NA

c. Fire extinguishers are of the proper type, size, and properly placed so as to support incipient fire fighting activities.

Yes No NA

d. Placement of illuminated exit signage to include identification of non-fire exit doors in egress routes is appropriate.

Yes No NA

e. Emergency lighting is appropriate and operational.

Yes No NA

f. Emergency exits and egress corridors are maintained open and unobstructed.

Yes No NA

g. Accumulation and storage of flammable and combustible materials are controlled so as not to contribute to a fire emergency.

Yes No NA

h. In the event of a fire, staff are knowledgeable of their roles, required actions to be taken in the event of a fire, how to safely evacuate the fire hazard location, and the location of the staff re-assembly point.

Yes No NA

Appendix 3: SIMS Checklist

Does the organization have an integrated management system? Below is a checklist of questions to answer about whether an organization has an integrated management system. If answers to all these questions are "yes," an integrated management system exists! If answers to any of the questions are "no," these are areas on which to work. Topics in the checklist are covered in the chapters indicated in parentheses.

System	Yes	No
1. Have integrated decision-making systems been developed?		
a. Is there interdepartmental collaboration, coordination, and decision-making around developing, implementing, and evaluating programs and policies to promote and protect worker health? (Ch. 1)		
b. Have the health and safety management program and worksite health promotion program been integrated where possible? (Ch. 1)		
c. Are adequate human and fiscal resources allocated to implement SafeWell? Does the program have a budget? (Ch. 1)		
d. Are resources allocated to support interdepartmental collaboration and coordination? (Ch.1)		
e. Do vendors and their staff have the experience and expertise necessary to coordinate with and/or deliver the SafeWell approach? (Ch. 2)		
f. Are staff trained in explaining and conducting the SafeWell approach? (Ch. 3)		
g. Has a SafeWell Steering/Leadership Committee been appointed and activated? (Ch. 1)		
h Does the Steering Committee have representation (management and employee) from occupational health, health promotion, and human resources? (Ch. 1)		
2. Do integrated program planning, implementation, and evaluation occur?		
a. Is there knowledge about what data are already collected? (Ch. 2)		
b. Is there knowledge about who collects, analyzes, stores, and communicates about data? (Ch. 2)		

c. Have discussions occurred regarding the use of integrated data systems? (Chs. 1, 2, 4)		
d. Has it been possible to integrate data systems across the organization to coordinate data gathering, management, and analysis? (Chs. 2, 4)		
e. Have the data been analyzed and interpreted by members from OSH, WHP, and HR? (Ch. 2)		
f. Has consensus been reached on integrated priorities? (Ch. 2)		
g. Has a consensus program plan been developed that integrates OSH, WHP, and HR to help achieve goals? (Ch. 2)		
h. Has the integrated SafeWell approach been implemented? (Ch. 3)		
i. Has evaluation and corrective action occurred? (Ch. 4)		
3. Is there a multilateral communications program?		
a. Are different communications vehicles used? (Ch. 1)		
b. Are communications appropriate for the various types of employees and management that exist? (Ch. 1)		
4. Are all levels of employees engaged? (Ch. 1)		

Appendix 4: Example of an injury/exposure investigation form

On the next page is an example of an injury/exposure investigation form developed and implemented at the Dartmouth-Hitchcock Medical Center, Lebanon, NH. The permission to include this form is granted by Lindsey Waterhouse at Dartmouth-Hitchcock, the collaborator on the development of these guidelines. The purpose of the investigation is to identify root causes of injuries and exposures, and consequently, to eliminate or reduce the root causes to prevent injuries and exposures.

The Safety & Environmental Programs Department of Dartmouth-Hitchcock reviews all incident reports for cause and investigates follow-up actions. The incidents that meet the criteria as OSHA recordable incidents require a formal investigation by the affected supervisor/manager or the Safety & Environmental Programs Department. A Safety Officer investigates all serious or unusually frequent incidents or near-misses within all Dartmouth-Hitchcock Medical Center Departments. Investigation results are regularly reviewed by the Employee Health and Safety Subcommittee. The results are presented to the Environment of Care Committee.

Supervisor Occupational Exposure Assessment Report

Employee Name _____ Sex of Employee (Check one) ☐ F ☐ M

Department _____ Employment Status (Check one) ☐ FT ☐ PT

Date of Incident/Injury _____ Location of Occurence _____

Regular Assigned Position _____ Length of time in position _____

Was Employee Performing Regular Job Duty? (Check One) ☐ y ☐ n If no, Explain _____

This task is performed (check one) ☐ Daily ☐ Weekly ☐ Monthly ☐ Yearly ☐ Seldom

Was Employee working overtime? (Check One) ☐ y ☐ n If yes, Explain _____

Does employee work a rotating shift? (check one) ☐ y ☐ n Was there a recent change in shift? ☐ y ☐ n

Witness' Name _____ Witness' Job Title _____ Witness' Phone Number _____

Employee's Supervisor at time of incident

Where did the incident happen? _____ Time of Incident _____

What body part was injured? Nature of the injury _____

Severity of Injury (check one) ☐ First Aid ☐ Doctor's visit ☐ ED Visit ☐ Occupational Medicine Visit

Effect on Work Status (check if applicable) ☐ Restricted Duty ☐ Lost Time

Describe, in detail, what happened _____

Has this employee received previous training to prevent this type of injury? ☐ Yes ☐ No if yes, date _____

Describe previous training (if applicable) _____

Describe any damage occuring to equipment

How do you think this incident could have been prevented?

Environmental Factors (check those that apply)

☐ Weather Conditions	☐ Hazardous Chemical/Substance	☐ Noise
☐ Heat	☐ Smoke/Fumes	☐ Dust
☐ Cold	☐ Third Party	☐ Other

If you checked "other", please define _____

Work Conditions (check those that apply)

☐ Poor Housekeeping/Clutter	☐ Uneven/wet/slippery walking surface	☐ Lack of Adequate Ventilation
☐ Defective/Inappropriate Equipment	☐ Lack of Adequate PPE	☐ Poor Building Design
☐ Lack of Adequate Work Space	☐ Lack of Adequate Lighting	☐ Other

If you checked "other", please define _____

Personal Factors (check those that apply)

☐ Unsafe Act/Inappropriate Behavior	☐ Lack of planning/preparation	☐ Violation of safety rules
☐ Lack of Knowledge/skill/experience	☐ Fatigue/stress	☐ Mental/physical deficit
☐ Improper motivation/inattention to detail	☐ Deviation from established procedure	☐ Other

If you checked "other", please define _____

1

Job Factors (check those that apply)

- ☐ Inadequate Design
- ☐ Lack of adequate procedures/policies
- ☐ Lack of Inspection
- ☐ Lack of or unsafe tools/equipment
- ☐ Lack of maintenance
- ☐ Inadequate purchasing

Management Issues (check those that apply)

- ☐ Insufficient Training
- ☐ Lack of orientation of hazard identification
- ☐ Lack of planning for safe operations
- ☐ Lack of program support/time for program support
- ☐ Lack of enforcement of expectations of safe work practices
- ☐ Budgetary Constraints
- ☐ Understaffed
- ☐ Failed to identify hazards in the workplace/activity

Corrective Action Plans (include immediate, short term, and long term plans)

Immediate Action _____

Assigned to _____ Date Accomplished _____

Short Term Plan _____

Assigned to _____ Date Accomplished _____

Long Term Plan _____

Assigned to _____ Date Accomplished _____

Additional Information _____

Investigation Completed By _____ Date _____

Reviewed By _____ Date _____

SEP Action :_____ Date _____

_____

2

Appendix 5: JourneyWell Dimensions of Corporate Wellness Scorecard

This following scorecard has been developed by JourneyWell, a health consulting firm, for employers and employer-employee groups to assess the existence and strength of effective health programs at the worksite. It is based on the National Institute for Occupational Safety and Health's (NIOSH) "*The Essential Elements of Effective Workplace Programs and Policies for Improving Worker Health and Well-being.*" Permission to include here has been granted by JourneyWell

JourneyWell®

Dimensions of Corporate Wellness

presented to

<COMPANY NAME>

Contents

Section I **Overview and Scoring**

Section II **Organizational Culture and Leadership**

Section III **Program Design**

Section IV **Program Implementation and Resources**

Section V **Program Evaluation**

Section VI **Scoring Summary**

Overview

JourneyWell interventions support comprehensive approaches to reduce workplace hazards and promote worker health and well-being. Based on scientific research and practical experience in the field, comprehensive practices and policies that take into account the work environment--both physical and organizational--while also addressing the personal health risks of individuals, are more effective in preventing disease and promoting health and safety than each approach taken separately.

The following scorecard is based on the National Institute for Occupational Safety and Health's (NIOSH) "*The Essential Elements of Effective Workplace Programs and Policies for Improving Worker Health and Well-being."* In order to maintain the concepts from the original document, each of the twenty essential elements is presented alongside the original description.

JourneyWell has adapted this scorecard as a guide for employers and employer-employee partnerships wishing to establish effective workplace programs that sustain and improve worker health. Outlined below are twenty components of a comprehensive work-based health protection and health promotion program, categorized into four dimensions: 1) Organizational Culture and Leadership, 2) Program Design, 3) Program Implementation and Resources, and 4) Program Evaluation.

Scoring

Employer groups are asked to rate the presence of each essential element on a scale from 0 to 5. Ratings are related to the following definitions:

0 Does not apply at all
1 Applies somewhat
2 Applies frequently
3 Applies often
4 Applies almost always
5 Fully applies

Scoring is anchored against the 0-5 scale where "0" implies that the essential element do not exist or apply at all (0%) and "5" implies that the essential element is completely present and applied 100%. Scores of 0, 1 and 2 reflect a presence of the essential element of less than 50% whereas scores of 3, 4, and 5 reflect a presence of the essential element of 50% or higher.

The scoring grid presents the maximum possible sub-scores for each of the essential elements dimensions and the maximum possible score for the entire scorecard.

Organizational Culture and Leadership

After reading each essential element, select the number in the corresponding cell that most accurately represents your organization's success in integrating this essential element.

Essential Element	Description	Does not apply at all	Somewhat	Frequently	Often	Almost always	Fully applies
Develop a "Human Centered Culture"	Effective programs thrive in organizations with policies and programs that promote respect throughout the organization and encourage active worker participation, input, and involvement. A Human Centered Culture is built on trust, not fear.	0	1	2	3	4	5
Demonstrate leadership	Commitment to worker health and safety, reflected in words and actions, is critical. The connection of workforce health and safety to the core products, services and values of the company should be acknowledged by leaders and communicated widely. In some notable examples, corporate Boards of Directors have recognized the value of workforce health and well-being by incorporating it into an organization's business plan and making it a key operating principle for which organization leaders are held accountable.	0	1	2	3	4	5
Engage mid-level management	Supervisors and managers at all levels should be involved in promoting health-supportive programs. They are the direct links between the workers and upper management and will determine if the program succeeds or fails. Mid level supervisors are the key to integrating, motivating and communicating with employees.	0	1	2	3	4	5
Organizational Culture and Leadership sub-score							
Maximum possible sub-score		**15**					

Program Design

Essential Element	Description	Does not apply at all	Somewhat	Frequently	Often	Almost always	Fully applies
Establish clear principles	Effective programs have clear principles to focus priorities, guide program design, and direct resource allocation. Prevention of disease and injury supports worker health and well-being.	0	1	2	3	4	5
Integrate relevant systems	Program design involves an initial inventory and evaluation of existing programs and policies relevant to health and well-being and a determination of their potential connections. In general, better integrated systems perform more effectively. Programs should reflect a comprehensive view of health: behavioral health/mental health/physical health are all part of total health. No single vendor or provider offers programs that fully address all of these dimensions of health. Integrate separately managed programs into a comprehensive health-focused system and coordinate them with an overall health and safety management system. Integration of diverse data systems can be particularly important and challenging.	0	1	2	3	4	5
Eliminate recognized occupational hazards	Changes in the work environment (such as reduction in toxic exposures or improvement in work station design and flexibility) benefit all workers. Eliminating recognized hazards in the workplace is foundational to WorkLife principles.	0	1	2	3	4	5
Be consistent	Workers' willingness to engage in worksite health-directed programs may depend on perceptions of whether the work environment is truly health supportive. Individual interventions can be linked to specific work experience. Change the physical and organizational work environment to align with health goals. For example, blue collar workers who smoke are more likely to quit and stay quit after a worksite tobacco cessation program if workplace dusts, fumes, and vapors are controlled and workplace smoking policies are in place.	0	1	2	3	4	5

Program Design

Essential Element	Description	Does not apply at all	Somewhat	Frequently	Often	Almost always	Fully applies
Promote employee participation	Ensure that employees are not just recipients of services but are engaged actively to identify relevant health and safety issues and contribute to program design and implementation. Barriers are often best overcome through involving the participants in coming up with solutions. Participation in the development, implementation, and evaluation of programs is usually the most effective strategy for changing culture, behavior, and systems.	0	1	2	3	4	5
Tailor programs to the specific workplace and the diverse needs of workers	Workplaces vary in size, sector, product, design, location, health and safety experience, resources, and worker characteristics such as age, training, physical and mental abilities, resiliency, education, cultural background, and health practices. Successful programs recognize this diversity and are designed to meet the needs of both individuals and the enterprise. Effective programs are responsive and attractive to a diverse workforce. One size does not fit all—flexibility is necessary.	0	1	2	3	4	5
Consider incentives and rewards	Incentives and rewards, such as financial rewards, time off, and recognition, for individual program participation may encourage engagement, although poorly designed incentives may create a sense of "winners" and "losers" and have unintended adverse consequences. Vendors' contracts should have incentives and rewards aligned with accomplishment of program objectives.	0	1	2	3	4	5
Find and use the right tools	Measure risk from the work environment and baseline health in order to track progress. For example, a Health Risk Appraisal instrument that assesses both individual and work-environment health risk factors can help establish baseline workforce health information, direct environmental and individual interventions, and measure progress over time. Optimal assessment of a program's effectiveness is achieved through the use of relevant, validated measurement instruments.	0	1	2	3	4	5

Program Design

Essential Element	Description	Does not apply at all	Somewhat	Frequently	Often	Almost always	Fully applies
Adjust the program as needed	Successful programs reflect an understanding that the interrelationships between work and health are complex. New workplace programs and policies modify complex systems. Uncertainty is inevitable; consequences of change may be unforeseen. Interventions in one part of a complex system are likely to have predictable and unpredictable effects elsewhere. Programs must be evaluated to detect unanticipated effects and adjusted based on analysis of experience.	0	1	2	3	4	5
Make sure the program lasts	Design programs with a long-term outlook to assure sustainability. Short-term approaches have short-term value. Programs aligned with the core product/values of the enterprise endure. There should be sufficient flexibility to assure responsiveness to changing workforce and market conditions.	0	1	2	3	4	5
Ensure confidentiality	Be sure that the program meets regulatory requirements (e.g., HIPAA, State Law, ADA) and that the communication to employees is clear on this issue. If workers believe their information is not kept confidential, the program is less likely to succeed.	0	1	2	3	4	5
Program Design sub-score							
Maximum possible sub-score		**55**					

Program Implementation and Resources

Essential Element	Description	Does not apply at all	Somewhat	Frequently	Often	Almost always	Fully applies
Be willing to start small and scale up	Although the overall program design should be comprehensive, starting with modest targets is often beneficial if they are recognized as first steps in a broader program. For example, target reduction in injury rates or absence. Consider phased implementation of these elements if adoption at one time is not feasible. Use (and evaluate) pilot efforts before scaling up. Be willing to abandon pilot projects that fail.	0	1	2	3	4	5
Provide adequate resources	Identify and engage appropriately trained and motivated staff. If you use vendors, make sure they are qualified. Take advantage of credible local and national resources from voluntary and government agencies. Allocate sufficient resources, including staff, space, and time, to achieve the results you seek. Direct and focus resources strategically, reflecting the principles embodied in program design and implementation.	0	1	2	3	4	5
Communicate strategically	Effective communication is essential for success. Everyone (workers, their families, supervisors, etc.) with a stake in worker health should know what you are doing and why. The messages and means of delivery should be tailored and targeted to the group or individual and consistently reflect the values and direction of the programs. Communicate early and often, but also have a long-term communication strategy. Provide periodic updates to the organizational leadership and workforce. Maintain program visibility at the highest level of the organization through data-driven reports that allow for a linkage to program resource allocations.	0	1	2	3	4	5

Program Implementation and Resources

Essential Element	Description	Does not apply at all	Somewhat	Frequently	Often	Almost always	Fully applies
Build accountability	Build accountability into program implementation. Accountability reflects leadership commitment to improved programs and outcomes and should cascade through an organization starting at the highest levels of leadership. Reward success.	0	1	2	3	4	5
Program Implementation and Resources sub-score							
Maximum possible sub-score		**20**					

Program Evaluation

Essential Element	Description	Does not apply at all	Somewhat	Frequently	Often	Almost always	Fully applies
Measure and analyze	Develop objectives and a selective menu of relevant measurements, recognizing that the total value of a program, particularly one designed to abate chronic diseases, may not be determinable in the short run. Integrate data systems across programs and among vendors. Integrated systems simplify the evaluation system and enable both tracking of results and continual program improvement.	0	1	2	3	4	5
Learn from experience	Adjust or modify programs based on established milestones and on results you have measured and analyzed.	0	1	2	3	4	5
Program Evaluation sub-score							
Maximum possible sub-score		**10**					

Scoring Summary

Essential Element Dimension	<YOUR COMPANY> sub-score	Maximum possible sub-score
Organizational Culture and Leadership	10	15
Program Design	50	55
Program Implementation and Resources	15	20
Program Evaluation	10	10
TOTAL SCORE	**85**	**100**

Appendix 6: Examples of questions for individual worker interviews to understand their experience specifically on worksite hazards and risks

In addition to safety and health worksite walkthroughs, worker interviews will help gaining additional insights and understanding to existing worksite hazards. Here are some examples of questions to ask workers that have been adapted from Markkanen, P. In-depth interview and focus group questions developed by the Project SHARRP (Safe Homecare and Risk Reduction for Providers), the Sustainable Hospital Program of the University of Massachusetts Lowell, 2005. These are not representative of worker views on health promotion or benefits, which could be included for a more integrated approach.

What is your job title?

How long have you worked at this worksite?

What specific tasks do you perform in your job?

Would you describe any dangerous situations you have encountered in your job?

Can you tell us about a particular experience that resulted in an injury or near-miss?

What kinds of conditions might contribute to dangerous incidents in your job (e.g. rushing hurrying, being tired, distractions) – could you give an example?

Tell us about machines, devices, equipment, or tools you use in your work.

What kind of chemicals or materials do you handle in your job?

Tell us about your workstation you use for your job.

If you could advise the leadership of your worksite, what advice would you provide them that could lead to safer and healthier work practices?

We wanted you to help us in gaining insights of work hazards at the worksite that complement our other worksite hazard analyses. Did we miss anything important?

Appendix 7: Example of an Assessment Report Outline

The following is adapted from CDC's Workplace Health toolkit, available at http://www.cdc.gov/workplacehealthpromotion/assessment/reporting/index.html

I. Assessment Goals
II. Workplace Assessment Process
III. Key Findings
    A. Description of Workforce at Aggregate Level
        - Demographics
        - Employee health and risk behaviors and attributes
        - Health care and pharmaceutical use and costs
        - On-the-job injuries, workers compensation costs
        - Employee productivity and attendance
        - Individual level barriers and opportunities to improving the health of the workplace
    B. Description of Workplace
        - Health-related programs, policies, and benefits
        -By disease or risk factor (e.g., tobacco, physical activity, injury)
        - Physical work environment
        - Management alignment with a culture of health
        - Communications across departments and level of employee
        - Data collection and evaluation systems for HR, OSH, Worksite Health Promotion (WHP), and for the coordinated SafeWell approach
        - Community linkages for safety, health, and well-being
        - Organizational barriers and opportunities to improving the health of the workplace
    C. Overall assessment of alignment of organization's programs, policies, and practices with the SafeWell approach

IV. Recommendations for Planning, Implementing, and Evaluating a SafeWell Program
    A. Description of the Program Planning process
        - Garner top leadership support
        - Align middle management with SafeWell program goals
        - Identify a coordinator and/or committee with diverse stakeholders
        - Dedicate resources to stimulate integrated functioning between departments
        - Develop a workplace health improvement plan with input from diverse stakeholders
        - Communicate widely about the program and plan
        - Leverage workplace health informatics across departments

B. Recommendations for Implementing Programs

This section should be organized based on the health issues, risk factors, and organizational factors and priorities identified for the worksite. Some example topics are:

1. Preventing and reducing injuries
2. Reducing work stress and improving health outcomes
3. Improving management systems to improve worker health and safety

The SafeWell approach suggests that whichever topic(s) is addressed, human and financial resources from OSH, WHP, and HR should be utilized collaboratively to address the priorities chosen. Additionally, the implementation recommendations will include recommendations for the worksite environment, organizational policies, programs, and practices, and individual level activities.

C. Recommendations for Program Evaluation

1. Link to goals and priorities
2. Careful tracking of participation and processes
3. Plan for longitudinal assessment of changes
4. Periodic analyses of data on outcomes—demonstrate both short and long-term improvements/declines
5. Factor in opportunities for change if programs/policies are not meeting expectations
6. Consider leveraging data across OSH, HR, and WHP

Chapter 3: Implementation

What is an "integrated" approach to workplace health? page 114

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Appendix 1: Sample SafeWell programs page 135

Appendix 2: Workplace health promotion and health protection tools and resources page 157

Chapter overview

This chapter describes the implementation phase of integrated workplace health programming. Included are:

- A description of the levels of implementation (environmental, organizational and individual), and what they look like
- An outline of the steps of implementation, with examples
- A description of a hospital food service/cafeteria overhaul, as a theoretical example of integration on a large scale
- Some additional sample programs from the Center's workplace studies, and suggestions for additional resources
- Descriptions of organization using approaches similar to SafeWell

What is an "integrated" approach to workplace health?

As previously described in these Guidelines, the concept of an integrated workplace program refers to the strategic combination of health protection (from an occupational safety approach) and health promotion (from a wellness perspective). Another aspect of this concept is attention to organizational supports such as benefit design, balance, and the quality of work-life. Finally, this approach requires implementation across multiple realms: the overall physical environment (personal workspace, overall layout); the organizational environment (policies, practices, norms); and at the individual level, personal decision-making and behavior choices.

Implementing an integrated program: What does it look like?

The end of "Chapter 2: Program Planning" included a plan based on a company's priorities and the data gathered from workplace assessments of employees, the organization, and the physical facility. Implementation is the execution of that plan. It includes everything from specifying objectives, timelines, and measures for success, to identifying key personnel, and obtaining programmatic resources. The Centers for Disease Control and Prevention identifies four major categories for workplace strategies and interventions: (available at: http://cdc.gov/WORKPLACEhealthpromotion/model/)

1. Programs: Opportunities available to employees at the workplace or through outside organizations to begin, change or maintain health behaviors
2. Health-related policies: Formal/informal written statements designed to protect or promote safety, health, and wellbeing and affecting large groups of employees simultaneously
3. Benefits: Part of an overall compensation package including health insurance coverage and other services or discounts regarding health, safety and wellbeing
4. Environmental supports: Physical factors at and nearby the workplace that help protect and enhance employee health

The implementation of the plan is where these strategies become visible, whether this is a major component, like revamping the cafeteria and food service to improve the health of all employees (including the safety and ergonomics of cafeteria workers), or something less extensive like distributing educational materials on factors impacting healthy eating choices at work and at home. It is a given that companies will vary greatly in size, organization, and resources, so the different types of programs and styles of implementation will accordingly vary.

Implementing on multiple levels

Implementation includes policies, events, activities, practices, and materials or products at all levels, from environmental and organizational, through interpersonal and individual. The CDC Workforce Health Promotion Initiative (http://cdc.gov/workplacehealthpromotion/implementation/index.html) describes these levels of implementation as follows:

- **Environmental:** Implementation at this level involves physical aspects of the workplace, such as facilities and settings where employees work, including layout and design of workspaces, shower facilities, bike racks, noise levels, air quality, and exposure to toxic substances. Interventions at this level can provide protection from work place hazards and support for healthy behaviors.
- **Organizational:** This level includes elements of the workplace structure, culture, practices and policies such as health benefits, health promotion programs, work organization, and leadership and management support. This has also been described as the "psychosocial environment" and includes work schedules, coordinating work and home responsibilities, deadlines, shift work,

job security, available training and support, and interpersonal relationships, including supervisor communication and feedback, peer communication, family relationships. Interventions at this level can provide support for safe work practices and for healthy behaviors. Psychosocial hazards have often been identified as contributing factors to workplace safety and health risks.

- **Individual:** This level includes elements of an employee's individual health behaviors and health and safety knowledge, personal risk factors, and current health status. Whenever environmental or organizational changes are put into effect, there is always a "human factor"--a result of the interface between people, organizations and environments that accounts for the variability among individual experiences.

While these levels overlap, each of them accommodates different types of implementation, and the best workplace health programs make use of all of them in a coordinated manner. A program that primarily addresses an individual behavior, such as smoking, might include an individual level health risk assessment with feedback or health coaching (see "Chapter 2: Program Planning") to increase employees' awareness and knowledge of tobacco as a risk factor. It may also include organizational level elements (e.g., a campus-wide nonsmoking policy and benefits providing Quit classes and nicotine replacement therapy) and environmental level components such as a walkthrough to identify any potential air quality issues that may interact synergistically with tobacco smoke to increase risk of disease.

Note that the degree of integration at an organization may also vary. When beginning to use the SafeWell approach at the basic level, it may be necessary to purchase programs from a vendor or bring in community resources, and it may not be possible to integrate all the program elements. Companies need to start where it makes sense to start, both for management and for employees. Rather than "starting small," companies should consider "starting smart" by leveraging existing resources to get the most immediate change, visibility, and success.

Controlling workplace hazards

Controlling workplace hazards requires taking action, but there is a wide variety of available options. The action may be a walk-through assessment of the physical environment or implementing a standard protocol for training employees to prevent exposure to biological hazards. Ideally, identified hazards are eliminated through a comprehensive occupational safety and health management (OSHMS) program. Although there are instances where eliminating the hazard is not possible (in a hospital setting, this might be exposure to blood or infectious organisms; or it might be musculoskeletal, such as handling and transferring of patients), it is always possible to reduce exposure to hazards through preventive measures.

Within the options for taking action, some are recommended over others. The SafeWell guidelines follow the "hierarchy of controls" model used in occupational safety and health practice as a means of implementing feasible and effective control solutions. In

this hierarchy, the most preferable option is to eliminate hazards completely. A good example of this approach is to eradicate risks through careful planning or redesign. For example, NIOSH has developed an initiative that has come to be known as "Prevention through Design," (PtD) (http://www.cdc.gov/niosh/topics/ptd/). The design of equipment, supplies, architectural space, and work processes can be influenced for enhanced safety. Eliminating hazards through design precludes the need for control.

The ranked options for minimizing hazards are included in descending order of preference:

- Elimination: See description above.
- Substitution: For example replacing a hazardous chemical with a less hazardous alternative
- Engineering controls: Controlling the hazard/risk at source through the use of engineering controls where feasible and appropriate (e.g., using mechanical transferring devices to minimize manual handling in patient care; using medical devices with injury prevention features, such as retractable syringes; ventilation for removing dusts, chemical vapors, and other impurities from indoor air; enclosures for noise prevention)
- Administrative controls: Establishing administrative controls to minimize hazardous exposures, including work practices, warning signs, training, housekeeping
- Personal protective equipment: Use of personal protective equipment as the last resort.

In the area of wellness, the "hierarchy of controls" does not always apply, because wellness programs focus more on encouraging healthful behaviors rather than controlling hazards. However, a parallel approach can be applied to controlling risks related to individuals and their behavior choices. For instance, eliminating smoking at the worksite means reducing the exposure of the smoker (and others) to tobacco smoke. This strategy is also used in company cafeterias and food services where some of the high-fat choices have been eliminated (or served less frequently) and replaced with healthier options. Other examples, illustrating the PtD concept, include the design of easily accessible and well-maintained walking paths at the work site, a large central staircase, or an on-site fitness facility to encourage physical activity. These options provide employees with opportunities to try something new on a small scale before committing to a more intensive program, or to practice small but repeated healthy choices.

Implementation Process Flow: Steps in the cycle

Table 2 describes the steps of the flow diagram in Figure 2, which represents a typical progression of steps for implementing an integrated program. As these Guidelines chapters illustrate, the overarching sequence is organizational leadership and commitment, planning, implementation, and evaluation. In this chart, the green boxes

represent decision-making steps involving organizational leadership and employee engagement (Chapter 1), blue boxes are steps in planning (Chapter 2), the gold box is for implementation (Chapter 3), and red boxes are steps in evaluation (Chapter 4). The purple box, "Start Smart," is explained below. The diagram shows a circular flow of steps, with the potential for overall continual improvement in the system, so each cycle of improvement builds on previous experience and lessons learned. While Figure 2 represents a process flow, there may be overlaps and feedback loops between the boxes. For instance, depending on what resources are engaged, objectives may need to be reset, or as materials are developed, more resources may need to be engaged. An additional example is if at the "set timeline" step it becomes clear that more time is needed, options might include adjusting the time frame or revisiting the objectives set earlier to see if they might be scaled back to meet the time frame.

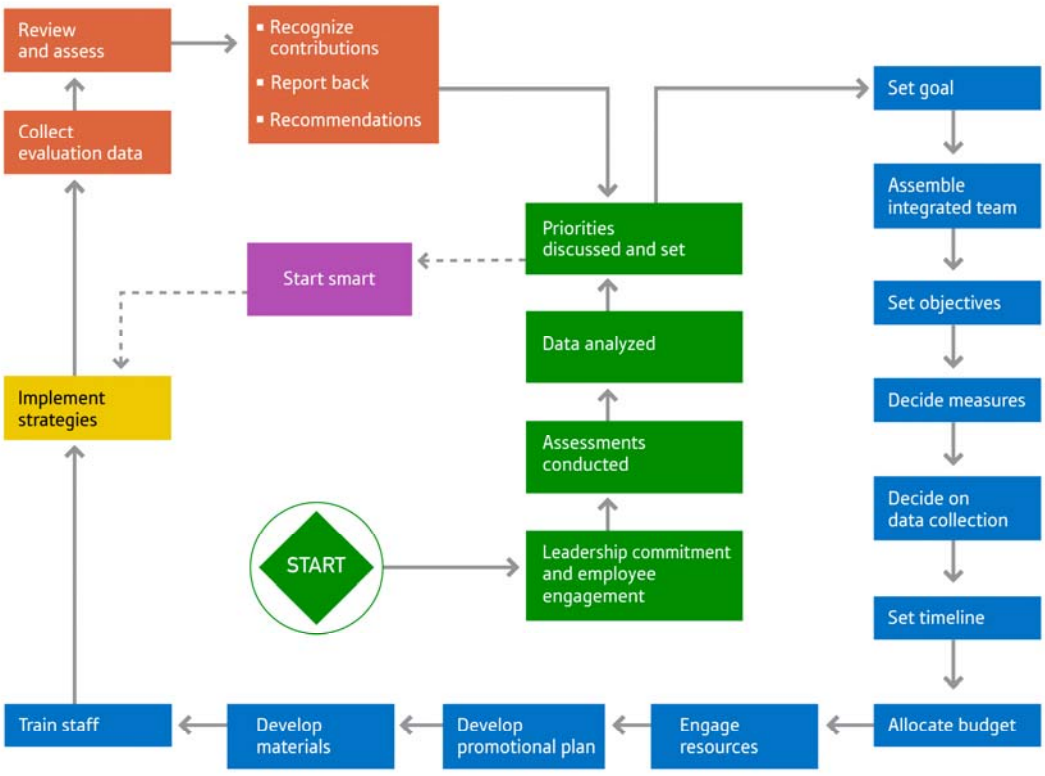

Figure 2 SafeWell implementation process flow

Start Smart

It is important to keep in mind that this is a cycle that can be initiated at any point that makes sense for the company's situation. The overall process is iterative. The steps in this process flow are somewhat fluid and, as illustrated in Figure 2, do not always follow a direct progression.

Strategic detours and shortcuts may be taken when opportunities present themselves. For instance, perhaps a company has already completed environmental assessments, organizational policy reviews, and employees have completed individual health risk appraisals (HRAs). As a result, the company already has analyzed the data, prioritized issues and set goals. It does not make sense to have to re-do all these assessments. Rather than waiting months for the complete assessment, the planning committee might go ahead with health coaching activities for employees based on their HRA results. This option allows the use of the HRA data immediately by offering individual feedback and counseling to employees. This is an example of "starting smart" (the purple box in Figure 2) because capitalizing on the available data and priorities to jumpstart activities builds on processes already underway at worksites. It can also begin to engage employees and build awareness of the overall program goals and objectives, while the larger-scale planning is continuing.

Table 2 below describes each of the steps of the flow chart in more detail, and provides an example of implementation based on the sample plan from Chapter 2 (page 83) which had as its priority the reduction of back injuries. A description of each step is provided in the table below.

Table 2 Description of SafeWell implementation process flow steps

Implementation step	Description
LEADERSHIP	High-level organizational leaders endorse and commit to the integrated program. *Example:* In a prominent article featured on the organization's intranet site, the President/CEO is interviewed about the benefits of the SafeWell program and why the organization has initiated it.
ENGAGEMENT	Employees at all levels become involved in the program. Some are particularly interested in the employee advisory board (or expanded health and safety committee). Supervisors are encouraged to allow time for hourly staff to participate. *Example:* Recruitment notices are distributed to solicit employees to join the Employee Advisory Board (EAB) to provide representation for their department or work group.
ASSESSMENTS	Organization-wide assessments are conducted, including employee surveys and health evaluations, OSH walk-throughs, focus groups (on safety and wellness topics), data reviews, etc. (See Chapter 2 for samples).

	Example: Employees are offered an individual health risk appraisal with follow up counseling by phone with a health coach.
DATA ANALYSIS	Findings from assessments are tabulated and analyzed for trends, comparisons with benchmarks where available, and to identify priority areas needing change. *Example:* Data from the health risk appraisals are aggregated and analyzed; results are reviewed by department, by demographic group, over time, etc.
SET GOAL	Identify the goal, which is the actual change desired, and the measure (how it will be assessed to determine whether it has been reached). Measurable objectives for goals are specific, with a target number or percent and timeline. Example (from Chapter 2): Goal: To reduce back injuries Measurable objective: Reduce the number of back injuries at work by 10% in the Orthopedics Department in 1 year.
ASSEMBLE THE INTEGRATED TEAM	Identify and assemble the integrated working team responsible for implementing this plan. This is different from the EAB; it may be an existing group or it may be convened ad hoc, but its focus is to focus on achieving the already chosen and specific goal. The more integrated this team is, the better. Recruit representatives from as wide an array of units as possible. This may include OSH, HR, WHP, administration, purchasing, communications, information systems, and others. Set a schedule for meetings and distribute a contact list for communications. *Example:* In the Chapter 2 example, the program lead is the Director of OSH. S/he will be assisted by a team including an OSH nurse, the Nurse Manager on Orthopedics, a nurse champion from Orthopedics, the Wellness Coordinator, an HR representative for benefits, and the Communications representative for the SafeWell program.
SET INTEGRATED OBJECTIVES	Present the plan and its overall goal to the team. Discuss, brainstorm, and set specific objectives to achieve the goal. Look for evidence-based interventions (EBIs) that will fit the goal (*See Appendix 2 for EBI resources such as The Community Guide, RTIPS, etc.).* *Example*: Organizational and environmental objectives:

	• Institute safe patient handling/movement (SPH) policy and procedures • Install SPH equipment • Institute other ergonomic programs and policies • Instill supervisor support of staff break-time • Instill supervisor support of physical activity • Provide benefits through HR for gym memberships • Make walking trails and stairwells attractive • Provide areas for stretching Individual level objectives: • Train staff and supervisors in SPH • Communicate to all employees ways to reduce back injuries at home and at work • Install ergonomic work stations for office workers • Provide burn-out prevention counseling for individuals • Instill co-worker support of break-times • Instill co-worker support of exercises to strengthen backs
DECIDE ON MEASURES	Identify appropriate measures for the overall goal and for each objective. Look for measures that will demonstrate that the goal has been met. Additionally, process measures can track communications, policy implementation, trainings, and programs that occur. *Example:* Overall measure: The baseline measure will be the number of back injuries in the Orthopedics Department at the start of the program. The follow-up measure will be the same number, at one year from baseline.
DATA COLLECTION	Decide how the measures will be applied, i.e., how data will be collected. *Example:* The data will be drawn from the Occupational Hazard and Injuries Report Form (e.g., Chapter 2, Appendix 4) and the employee health assessment.
SET TIMELINES	Decide on due dates and time frames for all activities, including preparation, promotion, events and activities, and evaluation and reporting. Each step/objective will need to be outlined with its corresponding due dates. It is often helpful to work back from the date of the event/activity (or policy/program implementation). *Example:* First, there will be communications to employees about the need for new practices. Then a schedule for trainings

	will be implemented and environmental changes (e.g. ergonomic work stations) will be implemented. Finally, policy changes will be announced.
CREATE BUDGET	Determine a budget required to meet these objectives and make allocations. Identify and engage resources (human and material). Determine what resources are needed and designate individuals to obtain them. This may include incentives and rewards, such as financial rewards, time off, and recognition. Get approval for purchasing supplies, equipment, printing, vendor services, etc. Consider sharing costs across OSH, WHP and HR departments. *Example:* Estimates are obtained for installation of ergonomic work stations. For other strategies, the only costs are related to communication (posters, handouts, table tents to provide education about back safety, stretching areas and tips, taking break time, physical activity, etc.); the hospital's communications department provides in-kind support through printing and design services. Funds are allocated for paper and ink for posters and handouts. Material provided on the organization's intranet is at no cost. Several costs are covered by existing services (subsidy benefit for gym membership, group programs and individual ergonomic consults from OSH staff, etc.).
PROMOTION	Develop a strategic promotion plan, considering all constituencies involved in this program: medical staff, administrative staff, patients, and families. Obtain supervisor support for employee participation. *Example:* The team meets with the Marketing, Communications or External Affairs departments to strategize about the best way to promote the new program to each of these constituencies.
MATERIALS	Develop materials for targeted promotion and education. Educational materials for participants/families may need to go through an approval process. *Example:* Materials include handouts for programs; posters for workplace; brochures for employees; notices on hospital intranet; table tents in cafeteria.
STAFFING	Train staff, or arrange for appropriate vendors or volunteers to deliver programs. *Example:* HR negotiates with a local YWCA to bring in an

	exercise group leader to provide presentations about back health, safety, and exercises for strengthening core muscles. A staff doctor provides training for supervisors on the relationship between back health, worker productivity, and overall well-being.
IMPLEMENT	Implement the planned strategies for the specified event, activity, policy or program. *Example:* A training curriculum for use of new SPH equipment is made available on the intranet and in scheduled small group sessions by department.
EVALUATE	Collect information on the program, policy, or event itself and how it was implemented. This can include process information such as: participation rates, resources used, training time, costs, etc. *Example*: Process data is collected to track costs and time spent toward meeting this goal. For satisfaction data, employees are asked about satisfaction with programs, or changes in policies and procedures. For programs or events, this could be a brief survey completed for a chance to win a raffle prize, or quick exit interviews conducted by staff, for example. Knowledge and behavior change data (could be pre/post or benchmark comparison) is collected to assess information changes, including knowledge of the topic and awareness of policy, and how many have taken advantage of a new benefit.
REVIEW	Reconvene the integrated team to: • Review results • Review costs • Assess feasibility • Assess participation • Assess whether objectives were met • Compare results to goal set originally *Example*: The group assesses the findings and concludes that many of the objectives were met: a new SPH policy was implemented and publicized, staff and supervisors were trained in SPH procedures, and Human Resources is now offering a gym membership rebate. However, regarding the measurable goal--a "10% reduction in back injuries at work in the Orthopedics Department in 1 year"--they will not be able to assess it until a year has passed and a follow up measure can be obtained.

REPORT AND RECOMMEND	This is a critical step in the continual improvement process. The written evaluation includes lessons learned and recommendations for continuing, repeating, or changing the implementation plan for the next time. The team presents their report to the organization's SIMS steering committee (see Chapter 1). Findings are used to inform future planning efforts, to set new priorities and to revise objectives. Objectives that are met are factored into revised goal setting. *Example:* The Integrated Team has learned effective ways to implement policy changes and communicate them to staff. Promotion strategies will be used again in working on future goals. Findings showed that participation was good across all three work shifts. Training competency on SPH will be included in supervisory performance evaluations. The team also found that staff did not increase their use of available break time, so the team recommends that new strategies be designed for this objective, which can then be incorporated into the next appropriate event or activity.
RECOGNITION	Recognize working group participants for their contributions, for example by submitting success stories and pictures for organizational media (newsletter, intranet, etc.). *Example:* OSH staff who provided ergonomic evaluations for individual employees are recognized for their contributions with certificates of appreciation and an article in the employee newsletter. Employees who attended special exercise sessions and those who took advantage of a discount offer to join the YWCA were acknowledged. A revised edition of the Employee Policy Handbook, including the new policies, is made available by HR.

Now that the framework and steps for implementing the SafeWell approach have been discussed, it is useful to look at all these various components together in a hypothetical example.

Putting the components together: A SafeWell implementation example

Table 2 presented a series of implementation steps. The following section takes a closer look, with more examples, at one step in particular: "Set Integrated Objectives." All of the steps are important, but in this one the value of integrated thinking is critical. As

Chapter 2 demonstrated, assessments are a method for identifying problems or opportunities for improvement. The integrated team brainstorms solutions (strategies) to address those problems.

This hypothetical example of a cafeteria and food services overhaul addresses a combination of occupational and personal health factors, and includes environmental and individual strategies for addressing them. It illustrates how the process of designing an integrated plan for change is based on a systematic approach to analyzing problems and creating integrated solutions.

Protecting and promoting worker health through food services

The opportunity

After conducting a variety of assessments and reviewing findings, the Steering Committee at the hospital decided that high rates of obesity and injury incidents among workers involve cafeteria safety issues and food availability on site. They decided that implementing some major changes in the cafeteria and food services programming would be a prudent way to improve worker health, safety, and well-being.

The steering committee identified an integrated working team (see "Chapter 1: Providing the foundation") with representatives from safety and health, environmental services, human resources/wellness, employee health, benefits, the food service manager, purchasing, and a nutritionist. (They considered adding the project to the agenda of the existing Health and Safety Committee, but it seemed too large in scope for one committee.)

In this example, the specific risks identified are presented with the suggestions that were discussed for mitigating them. They are organized by level of implementation: environmental, organizational, and individual.

The goal

Recognizing that hospitals are high-stress work environments, the goal was to create a cafeteria experience in which employees could relax and recharge, enjoy healthy and high-quality, tasty food choices, and where food service employees could work safely and without undue pressure. The charge for the working team was to create a Strategic Plan to meet this goal and address all issues, including the following tasks:

- Identify risks related to the food service and the cafeteria
- Identify opportunities for improvement: measures to minimize risks and increase safety, including environmental, organizational, and individual measures
- Plan a program of communications and activities to convey hazard prevention and health promotion messages
- Identify an overall program goal and goals for each objective

The process

The group decided to conduct additional focus groups with food service employees, which provided them with more specific qualitative information. By discussing the greater context of the problems and identifying contributing factors (e.g., those related to work, home and community, safety, and wellness), the group identified several key issues that were contributing to the problems and needed to be considered. In addition, the group held brainstorming sessions to discuss the issues that were raised and generate lists of suggestions and options for improving occupational safety and health, food sanitation and safety, and promotion of healthy food options, while also considering the stress of balancing work and family obligations. This became the basis for the group's plan. With input from the multidisciplinary group, they brainstormed ideas without differentiating between "health promotion" and "occupational safety and health." Instead, they considered the levels and groups of workers to ensure that their plan was comprehensive and covered all aspects of working at the hospital–service, support, secretarial, professional, administrative, janitorial, supplies, technical, etc. The following list provides an idea of the "integrated" ideas they developed.

Environmental level implementation

Risks

A review of occupational health monitoring and disability data showed that the Food Service was one of the hospital's "At Risk" departments, where injury and near-miss incident rates were higher than 80% of the hospital's overall average injury rate. Some of the food prep equipment was older and lacked appropriate safety guards. Frequent lifting and carrying large boxes were causing musculoskeletal injuries. Although there were detailed procedures in place, there was constant concern about avoiding food-borne illnesses. The dining area had a high rate of slips and falls from spilled food and large crowds trying to get through in a hurry. Focus groups also showed that the cafeteria was unappealing for employees outside the food service. It needed painting and renovation from years of accumulated steam and cooking oil spills.

Idea list

- Ensure that all kitchen equipment has proper safeguards and ventilation
- Establish a "Quick response" protocol with the Safety Manager so that even seemingly small problems can be attended to quickly
- Assess all food safety and handling procedures as a preventive measure to avoid food contamination
- Use signage in appropriate languages to reinforce health and safety training
- Provide "chef mats" in areas where employees stand for extended periods
- Repaint and decorate to create a calm and welcoming atmosphere (in line with the rest of the hospital's public areas).
- Improve ventilation system for better (fresher) air quality

- Install new flooring designed to better handle spills
- Redesign food storage and prep areas for increased efficiency
- Redesign customer flow to create more space around cashier stations

Organizational level implementation

Risks

In the employee survey, food service staff as a group indicated that they felt they needed more training on safety and health measures. A related factor was that training materials were not always available in the languages spoken by the kitchen staff, and while they were reported that they understood, it was difficult for trainers to assess the accuracy of the self reports. Focus groups with staff found that another factor was the crowd flow; almost everyone arrived in the same hour period, making it stressful for the cooks, the line servers and cashiers. Although there hadn't been any recent serious burn accidents, frequent smaller burns and cuts were reported. Some of these staff members were long-time employees who knew many of the other employees, but if they took a minute to say hello, the stares of the others waiting impatiently only added to their stress. Employees reported often missing their breaks because of the volume of the work. There wasn't enough seating in the cafeteria, so mostly people purchased food and returned to their work areas to eat. This also meant that employees thought of the meals as "fast food" rather than a sit-down meal, so the biggest sellers were burgers and fries or chips with a soda. This also were among the least expensive meals. Satisfaction surveys and employee health risk appraisals showed that employees were not satisfied with the limited list of healthy offerings and were unaware of caloric content of cafeteria items.

Idea list

- Provide more regular safety training for staff, and include translated materials
- Collaborate with professional trainers in the Human Resources department to make the training more interactive and engaging
- Include more employee seating in the cafeteria
- Conduct a quick-and-easy food survey to identify which kinds of healthier foods employees wanted available
- Provide healthy foods in easy-to-carry containers and promote foods that don't require containers, like oranges and bananas
- Use labeling systems to help employees keep track of their calorie intake (people still wanted choices whether the food was "healthier" or not)
- Engage the hospital nutrition department to provide "Rate Your Plate" or "Ask the Nutritionist" events in the cafeteria, where employees could learn about the healthier choices available in the new cafeteria
- Subsidize healthier options so that they cost the same or less than the less healthy choices and use point of purchase promotion to encourage sales
- Provide brief, easy-to-read handouts about topics like food safety at home

- Provide education about portion control
- Experiment with more varieties of ethnic cuisines, particularly those lower in calories than American fast food; offer samples to gauge employee response
- Partner with local food producers or a farmers' market to provide seasonally fresh fruits and vegetables, including quantities to take home for the family
- Look into partnering with a local Farmer's Market to come on site once a week.
- Consider whether the lunch break can be lengthened by 15 minutes
- Provide picnic areas outside in good weather
- Make sure that vending machines have healthy options for off-hours
- Engage mid-level management to encourage employees not to skip breaks (and schedule more coverage whenever possible)

Individual level implementation

Risks

Employees working in the kitchen reported higher than average levels of injury, fatigue and stress. In focus group discussions and on surveys, employees overwhelmingly reported wanting or needing to lose weight, but didn't feel the cafeteria was the place to make healthy choices. They also indicated that they had to choose between eating and walking because there just wasn't time to do both. Because they were tired at the end of the work day, they were more likely to purchase fast food on the way home rather than plan to cook a healthier meal.

Idea List

- Provide state-of-the-art protection for food preparation workers (mesh gloves, fire retardant oven mitts, etc.)
- Provide a subsidy for comfortable shoes that provide arch support for employees who were required to stand for long periods
- Establish a Weight Watchers At Work program/club, with discounted memberships as an incentive. Offer calorie counter applications on the Health program web site
- Calculate and provide Weight Watchers "Points" for cafeteria offerings and use Weight Watchers recipes; distribute free copies of recipes
- Pilot test using "Family Size" take-out containers of main courses so that parents could bring a nutritious meal home with them instead of stopping at the drive-through

Integrated team's action plan

The team organized these ideas into tasks around the appropriate departments. With the designated managers, they created budgets, timelines, and decided upon evaluation measures to track. The health promotion staff from Human Resources researched evidence-based nutrition programs that were available online. Health and Safety staff

organized trainings and scheduled remediation tasks. The team determined that the scope of the changes required a promotional campaign, so they enlisted the hospital's communications staff to help them create a campaign and a special event to kick off the new program. The changes were unveiled at the hospital's summer family open house/family picnic so that employees' families could also attend.

Sample integrated programs

Creating activities and events that integrate and address occupational health and safety with worksite health promotion on all levels can be challenging. The best ideas for integration come from convening a multi-disciplinary group of people who are committed to improving worker health and understand the specific work processes and conditions. This is why a representative, integrated employee working group is foundational.

Samples of existing integrated programs are included in Appendix 1. One of these examples is a description and sample agenda for a **New Employee Orientation**. When an organization is committed to the SafeWell approach to worker health, it will be critical to provide new employees with an understanding of it. The Orientation provides an important opportunity to convey to new employees the mission, values, culture, and organizational commitment to their health and well-being. Each new employee will need to be introduced to these ideas and the expectation that while working there, they will need to embody them.

The program for **Carbon Monoxide Testing** shows how an interactive activity can be used to open a discussion with employees about their exposure to tobacco smoke and other hazardous substances or fumes at work and at home. Offering an individual "reading" from the analyzer has proved to be effective in attracting participants as well as personalizing the health message.

The **Label Lingo** program combines the ideas of reading food labels with reading labels on substances encountered in the workplace, and the ways in which substances–nutritious or otherwise–enter the body. This program could be used, for example, in conjunction with a cafeteria labeling campaign to highlight healthy options.

Organizations may not be able right away to create a campaign that includes activities that are completely integrated, but creating conceptual linkages is a step in the right direction and can open the way to considering a behavior change that has little motivation on its own. Bringing together the right people to represent OSH, HR, and WHP; having data to use for objectives and goals; knowing the audience; and applying some creative problem solving are all key factors for developing meaningful workplace programs.

Organizations using the SafeWell approach

There is increasing interest in successful strategies for healthy and productive workplaces. Some of the world's outstanding corporations, and some smaller organizations, have begun to look for integrated solutions. Included here are examples from the hospital sector, an international corporation, and one of the United States' largest government agencies.

Dartmouth-Hitchcock Medical Center

Dartmouth-Hitchcock Medical Center (D-H) is a nationally ranked academic medical center located in Lebanon, New Hampshire. Accredited by the Joint Commission, this teaching hospital is a 369-bed general medical and surgical facility with 19,874 recently reported admissions. The DMHC health system includes an academic medical center and a multispecialty physician group practice, which together employ more than 8,000 physicians, nurses and staff members across several locations. Dartmouth-Hitchcock's vision is to achieve the healthiest population possible, starting with their own workforce.

D-H's "Live Well/Work Well" (LWWW) is a health and well-being program that offers employees and their families the resources to be able to enjoy a healthier lifestyle and do what they want to do at home and at work. The program offers a wide range of health-related benefits and services, from immunizations and individual health promotion to occupational health and environmental medicine programs. Employees are offered free health and wellness assessments (followed up with video coaching), personalized nutritional assessments, interactive tools that provide education and recommendations for better sleep, health screenings, fitness classes (and scenic walking trails) and smoking cessation tools. LWWW also oversees workplace disability management and provides care management for complex or chronic medical conditions. The program's occupational health components include:

- Conducting workplace industrial hygiene and safety assessments
- Helping departments comply with OSHA, EPA, and Joint Commission standards
- Developing departmental safety programs
- Responding to employee indoor air quality exposure concerns
- Conducting workplace ergonomic assessments and recommendations of proper workstation set-up
- Reviewing employee reports of injury and conducts accident investigations
- Responding to hazardous chemical spills and conducting hazardous waste assessment, collection and disposal
- Supporting unit fire drills and fire safety training
- Through risk communication, working with directors to address employee health and safety concerns

The program is administered with careful attention to employee feedback, which it solicits and encourages. It has a focus on prevention, through education and training,

rather than simply monitoring compliance. LWWW provides customized services to departments with higher rates of occupational injuries or illnesses., and uses injury and illness reporting as sentinel events for employee health and wellness screening and to engage managers in efforts to improve worker health and well-being.

The overall program demonstrates DMHC's commitment from top management to strive to improve the health and wellbeing of all employees through high quality programs and effective policies related to occupational safety and health, workplace health promotion, and human resources.

Summarized from http://employees.dartmouth-hitchcock.org/livewellworkwell.html

NASA

The National Aeronautics and Space Administration has been a pioneer in the field of integrated worker health. With its workforce of 72,000 people in 14 locations, working in a highly competitive and stressful environment, employee health and productivity are critical to NASA's success. The Office of the Chief Health and Medical Officer (OCHMO) is responsible for the health and well-being of employees, providing guidance and oversight to approximately 400 Occupational Health professionals in order to create a network of support for the NASA workforce. The goal of OCHMO is to ensure that "*every agency employee, upon separation from NASA, is healthier than the average American worker as a result of their experience with NASA occupational and preventive health programs*."[1]

In 2003, realizing the need for a proactive effort to combat the high-stress, high burn-out atmosphere, OCHMO contracted with the Institute of Medicine (IOM) at the National Academies to review and make specific recommendations to improve NASA's occupational health programs. The IOM commissioned a committee that reviewed the literature, made site visits, and held an information-gathering workshop. The result, in 2005, was the report, "Integrating Employee Health: A Model Program for NASA" (available at www.iom.edu). The Committee found that NASA was ahead of its time in fostering employee health and safety programs, but that it could still benefit from a methodical and thorough integration of its health programs. The report suggested that occupational health programs be integrated with occupational and non-occupational disability and health benefits, program focus shifts from center-specific to employee-specific, and centralized collection of uniform health metrics and utilization data be implemented.[1] This report remains a vital capstone of integration.

In the last six years, OCHMO has introduced annual *Healthier You Campaigns* that promote the message of personal accountability for Health and Safety by enlisting a variety of tools. Campaign components include a 12-month *Health Calendar* that discusses different health topics and introduces a variety of learning activities in the context of a common theme. One thousand copies of the monthly Mayo Clinic *Embody Healt*h newsletters are distributed across all Centers. *Embody Health* (https://www.nasahealthieryou.com/) is an online Mayo Clinic e-health package for

health assessment and promotion, including a web portal for interactive activities such as *Health Assessment, Ask an Expert, Diseases and Conditions,* and *Healthful Recipes.* Site access (using a unique identifier for confidentiality) is available to all NASA employees, their spouses and children over the age of eighteen.

Summarized from http://ohp.nasa.gov/index.html.

Johnson & Johnson

The Johnson & Johnson Corporation includes more than 250 operating companies in 60 countries employing approximately 115,000 people. It is the world's sixth-largest consumer health company.

Johnson & Johnson has developed a credo to clearly state its collective values: "...a culture that celebrates diversity and diverse perspectives fosters a balance between work and home life and supports employee efforts to have a positive impact on communities."

Johnson & Johnson's Healthy People program provides employee assistance, occupational health and wellness, and health promotion services, along with a full suite of online resources through Health Media™ and a unique approach to increasing physical and emotional capacity through the Human Performance Institute™ and its Corporate Athlete ™ energy management principles. The company uses a voluntary employee Health Profile to design health programs to address key employee health risks. The profile is a confidential questionnaire that identifies health and lifestyle risks including tobacco use, blood pressure, cholesterol, and inactivity. In 2009, more than 30,000, U.S. employees participated in the Health Profile screening. An analysis of US data revealed that the top three risks among employees are unhealthy eating, physical inactivity, and obesity. To reduce these risks J&J implemented health and wellness programs and established company-wide performance goals.

Johnson & Johnson has developed a program called "Healthy Future 2015" which consists of seven strategic priorities, supported by 15 goals and corresponding targets to measure and drive performance. The Healthy Future 2015 strategies include several high-level goals (note the goal in bold type is related specifically to a healthy workplace and employees):

- Honoring our responsibility to communities by advancing community wellness by launching health initiatives to help people gain access to timely, easy-to-understand, health-related information
- Honoring our responsibility to communities by enhancing outcome measurement in philanthropy by assisting our philanthropic partners' capacity to measure program outcomes and raising the standard of health outcome measurement
- **Fostering the most engaged, health-conscious and safe employees in the world by improving upon our global culture of health and safety in our workplace, and continuing to strive to make Johnson & Johnson a place where our employees are proud and excited to work**

- Building on our legacy in safeguarding the planet by reducing the environmental impacts of our operations and our products
- Partnering with suppliers who embrace sustainability by joining with suppliers who demonstrate a similar commitment to ours through their practices, goal-setting and the positive impacts they seek to achieve
- Advancing global health through research and development for neglected diseases and affordable access to medicines by working to identify new and affordable ways to address these issues, and partnering with like-minded organizations to help expand our impact on global health
- Committing to enhanced transparency and accessing the power of external collaboration by collaborating with partners, and providing transparency on our products and business practices

Summarized from: *http://www.jnj.com/connect/about-jnj/*

References

1. Institute of Medicine, *Integrating Employee Health: A Model Program for NASA*. 2005, National Academies Press.

Appendix 1: Sample SafeWell programs

Program A: New Employee SafeWell Orientation

The orientation of new employees presents an ideal opportunity to begin introducing them to the SafeWell culture. From the staff who give the orientation presentations, to the materials the employee takes home, every aspect of the orientation can reflect the SafeWell principles. It is also critical that employees hear the message from the highest level of the organization--ideally, from one of the company's top administrators or through a videotaped message from the CEO (some sample talking points are included on below). The Sample Agenda illustrates how these elements can be incorporated into the day's activities.

Description

As the Steering Committee oversees the rollout of the SafeWell approach in the company, it needs to ensure that the integrated approach is incorporated into all possible aspects of the organization. People who come to work for the company may have never worked in a setting with this philosophy, so it makes sense to begin with the New Employee Orientation (NEO). The Steering Committee can direct or collaborate with Human Resources to develop a NEO program, including the agenda, appropriate hand-outs, and educational materials that reflect the company's integrated and comprehensive approach to safety, health, and wellness.

In the NEO, newly hired employees are introduced to the overall mission and values of the company. In addition, they begin the process of learning about important workplace policies and procedures, a process that continues into their specific department orientation. Many rules and practices relate to a healthcare worksite's safety and health concerns, for example, emergency procedures, infection control, bloodborne pathogen exposures, radiation hazards, and many other topics. The orientation is a useful venue for communicating with new employees about management's commitment to worker and worksite health, wellbeing, and safety.

Company representatives explain the company's commitment to providing a workplace that is safe and that supports employee goals to achieve or maintain optimal physical and mental wellness. Company wellness initiatives, incentives for joining an exercise facility or programs for quitting smoking, personal health assessments (e.g. biometrics, Health Risk Appraisals), annual safety-wellness fairs, and personal consultations are all presented. A Sample Agenda for new employee orientation-within the integrated safety, health, and wellness approach is provided on later in this section.

Educational format

This sample group event takes place over a full day as soon as the employee's hiring requirements have been met (e.g., TB test in a health care facility). In most medium to large companies, NEO sessions are held weekly.

Objectives for participants: Key messages

Following this activity, participants will be able to:

- Explain in their own words the company's mission and how employees' health and well-being fits into that mission
- Identify the organizational structure of SafeWell at their worksite: the Steering committee, working groups, etc.
- Identify examples of hazardous work and home exposures and behaviors (e.g., carbon monoxide, secondhand smoke personal hazardous behaviors (e.g. smoking)
- Explain in their own words why the company is invested in their personal health
- Identify exposures at work, in the general environment, and at home, that overlap (e.g., stress)
- Understand that a safe and healthy worksite is a productive worksite
- Understand that OSH is the employer's legal responsibility and workers have a significant role in creating a safe and healthy work environment
- Explain the SafeWell initiative at their worksite and how it integrates OSH and HP to improve and maintain the health and well-being of workers
- Identify where to locate SafeWell resources around the company

Staffing

Staff representing the areas of Human Resources, OSH, and WHP are all required to attend and present. One or two members of SafeWell committees may be present to talk about their roles.

Equipment and set-up

- An LCD projection system for presentations/videos
- Chairs and tables arranged in a semi-circle
- Fire extinguishers and appropriate safety equipment for training or demonstrating
- Educational materials
- Company brochure
- Company intranet guide
- SafeWell guide to company activities and resources: A well-designed, easily readable hand-out on the worksite's integrated safety, health, and wellness approach that includes:
    - Mission and values of company's approach to worker health and well-being
    - Summary of critical worksite safety and health issues
    - Guides to keep workers and the worksite safe and healthy
    - Explanation of how SafeWell benefits workers and workers' families

- List of all worksite's health promotion activities
- List of working committee and steering committee members

How to conduct this activity

- Provide at least two educators for safety, health, and wellness orientation component:
  - One available for safety and health briefing
  - One for wellness briefing
- Introduce presenters
- Distribute materials
- Review agenda
- Evaluate the quality of orientation at the very end, including how well safety, health, and wellness topics are understood
- Encourage questions
- Be sure that employees know where to go to get questions answered
- Complete evaluation forms

Tie-in with SafeWell initiatives

This activity provides a good opportunity to offer new staff specific ways to get involved in SafeWell activities and events. Have sign-up sheets ready for upcoming activities; "job descriptions" for working group members, etc.

Promotion

Promotion is not needed for this activity, as new hires are directed to attend by the hiring manager.

Evaluation

- True/False or fill in the blanks quiz for knowledge of company's core mission and SafeWell (anonymous)
- Count participants for tracking
- Count hours for tracking (including prep and clean up)

Follow-up

A new employee can absorb only a limited amount of information in the first few days. For that reason, a buddy system could be developed that supplements the orientation. A buddy system can provide on-the-job reinforcement of the information presented to the new employee at the NEO. Each employee can be paired up with a buddy who can answer questions the new employee might have. Such a system can reinforce the organization's integrated safety, health, and wellness approach both to the new employee, as well as to the experienced workers who are the "buddies."

Other organizational opportunities for reinforcing an integrated approach to worker health could occur at annual safety refresher trainings that employees attend, as well as worksite safety-wellness fairs. All such activities promote employees' participation in health promotion activities as well as improve safety and health practices.

Sample talking points about SafeWell from the CEO

The key points for the highest company representative to cover in his or her overview might include:

- The company's mission is to provide an "Environment of Care" to all our constituents: our patients and their families, our community, and most importantly, our employees
- The organization has adopted SafeWell, an approach to worker health and well-being
  - The organization functions at its best when employees are healthy, safe, and productive
  - Health promotion and health protection, home life, and work life are not easily separated in our new work culture
  - SafeWell represents a unified, coordinated effort, in every department and at every level, to integrate these areas
- You may not have ever worked in an organization that practices this approach, so here are the basics:
  - Your safety is key. We have Tom Jones here from our EHS department to tell you how we put that into practice every day
  - Your health is important. We will offer as many opportunities as we can for you to set health goals and get the support and information you need to get healthy or maintain your optimal health. Denise will tell you about those.
- That's what we bring to this effort.
- In return what do we need from you? We need your input.
  - If you see something that's unsafe, we need to know about it.
  - If you have ideas for a great health campaign, we want to hear about it.
  - If you see an opportunity for us to improve the SafeWell program, we're counting on you to tell us.
  - Without my support, this program wouldn't happen. But without your participation, it won't happen either. Everyone who works here is a critical part of the whole effort.
- How can you participate? Well, there are many ways. Some of our other presenters are going to tell you about them.

The facilitator for the session should then introduce the Working Group members.

- There are SafeWell working groups that act as the foundation of the program. You'll meet the member(s) of your department's working group and one of them

will be your “buddy.” This person will be able to answer any questions or address any concerns you have as you come on board our organization.

- For immediate concerns, we have an intranet system where with one button you can report an unsafe or potentially unsafe condition that needs immediate attention.
- On that same intranet system, you can do a personalized health assessment, review your results, and then look over the options that are available to you if you want to make changes in your personal health habits.
- If you already know what the problem is–for instance stress-related problems, because let’s face it, this is a stressful environment -you can consult, by phone or online, with a counselor who can direct you to the appropriate resources while totally protecting your privacy.
- The SafeWell intranet is your lifeline. If you’re not comfortable with a computer, we have training courses for you. And of course, there’s still the phone, and even real people you can talk with.

- So, this system represents a big investment on our part, and why do we do it? Because you invest 8 hours a day or more with us, month after month, year after year. We want you to stay here. We want you to thrive here. . We’ve looked at the research, and we know that this integrated system, where we all collaborate to keep our organization as safe and as healthy as it can be, will return our investment a hundredfold. Our patients will get the best possible care from people who enjoy the best possible health and well-being.
- What questions do you have?

New Employee Orientation sample agenda

Sample agenda within the integrated safety, health and wellness approach

Time	Topic	Presented by
8:30-9:00	Registration	
9:00–9:30	Welcome, opening, and introduction	Company CEO/video, Human Resources Representative
9:30-10:00	Key presentation about the company, company's mission, and key information	Human Resources Representative
10:00-10:30	Company's integrated approach to safety, health and wellness	Safety & Health, and Health Promotion Representatives
10:30	Break	
10:45-11:15	Company's workforce and code of conduct: Company's policies to respect co- workers	Human Resources Representative
11:15-11:35	Worksite Safety and Health Session 1: Emergency preparedness: fire safety, security, other emergencies in the company	Safety and Health Representative
11:35-12:00	Worksite Health Promotion Session 1: What HP activities does the company offer?	Health Promotion Representative
12:00-12:30	Lunch	
12:30-1:00	Key resources	Human Resources Representative
1:00-1:30	Worksite Safety and Health Session 2: Key safety and health issues in the workplace: infection prevention &control; ergonomic interventions to minimize manual handling	Safety and Health Representative
1:30-1:45	Break	
1:45-2:30	Worksite tour	
2:30-3:00	Benefits	Human Resources Representative
3:00–3:30	Worksite Health Promotion Session 2: Personal health assessments	Health Promotion Representative
3:30-4:00	Wrap-up: Questions and answers	Human Resources Representative

Program B: Carbon Monoxide Testing: "You Are What You Breathe"

Description

A table staffed by an educator will display a carbon monoxide (CO) analyzer, educational handouts, an informational display, and self-assessment questionnaire. Participants will receive a brief rationale for the activity from an educator. S/he will operate the CO Analyzer, record participant results on the handout (booklet) and follow the talking and counseling tips (see below). Possibilities for CO exposure from tobacco smoke (both active and passive), occupational exposures, and the general environment (independent of their results) will be explored with participants. Cigarette smoke will be highlighted as one of the major sources of CO exposure, as will potential non-tobacco sources of CO (e.g. fork lift exhaust indoors). Possible job-related, home or other CO exposures will be discussed with individual workers, and ways to reduce, avoid, or eliminate these exposures will be encouraged.

Educational format

This activity can be a stand-alone event or can be incorporated into a Health Fair or other larger event.

Objectives for participants:

Following this activity, participants will be able to:

- Identify their own CO readings and interpret it using the charts in their booklet or the informational display
- Identify personal behaviors (smoking) and passive exposures (e.g. secondhand smoke)
- Identify exposures at work, in the general environment, and at home that may elevate CO levels in the body
- State that tobacco smoke is one of the major sources of elevated CO (non-tobacco sources, although much less common, can elevate CO to levels that are immediately dangerous to life and health)
- State that CO is harmful because it reduces the supply of oxygen to the tissues, which presents a threat in particular to the heart and brain, because of their high oxygen needs
- State that the harmful effects of smoking cannot be offset completely by any known counter-measures; the only way to avoid the harmful effects of smoking is not to smoke and to avoid the tobacco smoke of others
- Strategize about ways to reduce or avoid CO exposures in the workplace, home and the general environment

Staffing

This activity can be run by one staff person.

Equipment and setup

It's possible that a local office of the American Cancer Society or American Lung Association has equipment that can be borrowed or rented. Several brands can be purchased, including:

- Smokerlyzer (http://www.bedfont.com/uk/english/smokerlyzer)
- CO Sleuth, Breathe E-Z Systems, Inc. (http://www.testbreath.com/index.asp)

Supplies

Disposable one-use tubes are also available from product distributors like those listed above. For 100 tubes the cost is about $35.

Educational materials

- Handouts with chart (see below)
- Quit smoking brochures (from community partner agencies or local department of health)

How to conduct this activity

1. Hi! Are you interested in checking your carbon monoxide level?
2. *If yes*: This is a Carbon Monoxide Analyzer. Have you done this in the past?
3. Acknowledge responses and provide the following information as needed.
4. "The CO analyzer measures the amount of carbon monoxide in your lungs and blood."
5. Place a fresh mouth piece on the hose attachment in front of every participant.
6. Conduct a practice run with the participant before the actual test.
7. Ask participant to hold his/her breath for 15 seconds.
8. Instruct participant to place his/her mouth around the mouth piece, make a tight seal with their lips, and exhale for 9 seconds or for as long as it takes to completely exhale the air in their lungs, but without excessive force.
9. Ask participant to keep his/her mouth on the mouthpiece till you tell them to remove it.
10. Tell participant they did a nice job.
11. Tell participant their reading and refer to the chart and interpret the reading (see interpreting results, counseling tips and talking points below).

CO Reading Interpretation Chart

ppm CO			Symptoms & Health Risks
60		}**Severe**	• Risk of heart attack doubles • Nausea, headache, irritability
50		}**High**	• Slight headaches • Shortness of breath on exertion • Impaired thinking • Strained heart
25		}**Moderate**	• Blood thickens from extra red cells, making heart work harder and increasing risk of abnormal clots
15 10 5		}**Low**	• Body makes extra red blood cells to get more oxygen • Increased blood flow to brain and heart
0		}**Normal**	• 0-4 ppm is normal

Interpreting results

Carbon monoxide is an odorless, poisonous gas that pollutes the air. Increased levels of CO can occur by exposure to car exhaust, cigarette smoke, second hand cigarette smoke, or a leaky furnace. CO "robs" oxygen from the blood, and increases stress on the heart. That's one reason why smokers are more likely to develop heart disease.

- CO level less than 5ppm: This is normal.

For smokers

- **CO = 5 to 10**: Your CO level is in a range we often see for smokers. Smokers with CO in this range have increased blood flow to certain organs (e.g., brain and heart). That means that your heart has to work harder than usual.
- **CO = 10 - 30:** Your CO level is about average for a smoker. At this level, your body produces more red blood cells trying to capture more oxygen. This thickens your blood, strains your heart, and increases the chance of clotting.
- **CO > 30:** Your CO level is higher than that of the average smoker. Typically we see smokers in the 10 - 30 ppm range. At this level, your heart is working very hard. The risk of heart problems increases when CO is this high. You may also experience headaches, shortness of breath, and impaired thinking.

- **For all CO levels:** A smoker's CO level increases over the course of a day with each cigarette smoked. CO is stored in the body and is reduced gradually after several hours of not smoking. Smokers' CO levels are usually pretty low in the morning and gradually increase over the day. After only about 24 hours of not smoking, the levels are similar to those found in nonsmokers, meaning that the body starts to recover after a quit attempt. It doesn't mean that a person's system is back to normal.

Counseling tips for smokers

1. Refer to CO level: “What do you think of these results?”
   Note: Their response may give you a sense of their stage of readiness to address their smoking, so shape the rest of the conversation based on what you learn.
   - Acknowledge their feelings
   - If surprised/embarrassed: “You seem surprised by these results. Was this not what you expected? This machine gives you information that may help you in case you are interested in changing your smoking.”
   - If happy with results/indifferent: “You seem pleased with these results?”
   - If unhappy/upset: “You seem concerned with the results...tell me a little bit about that, what are you concerned about?”
   - If no reaction, use a prompt such as “Were the results what you expected or were you surprised?”
2. “Smoking raises the CO level in your body. Tell me a little about your smoking habits...how often do you smoke, etc?”
   - Try to get info about when they smoke: "When do you mostly want a cigarette?" (e.g. in the morning, before or after lunch, etc.)
   - How often: “About how many times per day do you smoke?”
   - Have they tried to quit in the past? (Tell them that most smokers on average go through 6 quit attempts before they quit.)
3. What changes would you like to make if any?”
   Or if they’ve mentioned wanting to quit, ask “What do you hope to gain by quitting?”
   - Help them verbalize the *benefits* of quitting and the disadvantages of not quitting and let them weigh the choices.
   - Emphasize that their goals should be progressive, specific, and short-term to start.
   - Ask about social support, if appropriate.
   - Be supportive to those who think they may not be able to change.
4. Emphasize project recommendations: “SafeWell recommends that you quit and stay smoke free."
   - If meeting this: Praise and treat as action/maintenance.

- If doing less and they haven't reached their goal, praise what they are doing, for example: "It's great that you are trying to reduce your smoking OR trying to quit, so now may be a good time to:

  Attend activities on ways to reduce or quit smoking.

  Talk to your doctor about the best way for you to quit smoking or ...

  Read information about smoking cessation.

5. Write participant's goal on aworksheet if appropriate.

For non-smokers

CO<5 This is normal.

- **CO = 5 to 10**: Your CO level is in a range which causes increased blood flow to certain organs (e.g. brain and heart). That means that your heart has to work harder than usual.
- **CO = 10 - 30:** At this level, your body produces more red blood cells trying to capture more oxygen. This thickens your blood, strains your heart and increases the chance of clotting.
- **CO > 30**: Your CO level is higher than the average smokers'. Typically we see smokers in the 10 - 30 ppm range. At this level, your heart is working very hard. The risk of heart problems increases when CO is this high. You may also experience headaches, shortness of breath, and impaired thinking.
- **For all CO levels**: CO is stored in the body, and is reduced gradually, after several hours of not being exposed. After only about 24 hours of not being exposed, the levels are similar to those found in nonsmokers, meaning that the body starts to recover after a quit attempt. However, it doesn't mean that a person's system is back to normal.

Counseling tips for non-smokers

1. Refer to CO level: "What do you think of these results?"
   Note: Their response may give you a sense of their readiness to address exposures, so shape the rest of the conversation based on what you learn.
   - Acknowledge their feelings.
   - If surprised/embarrassed: "You seem surprised by these results. Was this not what you expected? This machine gives you information that may tell us whether you are being exposed to sources of CO."
   - If happy with results/indifferent: "You seem pleased with these results?"
   - If unhappy/upset: "You seem concerned with the results...tell me a little bit about that, what are you concerned about?"
   - If no reaction, use a prompt such as "Were they what you expected or were you surprised?"
2. Smoking, exposures to secondhand smoke and other sources of CO exposures such as leaky furnaces or exhaust fumes could raise the CO level in your body.

Let's review some of the possible sources of CO exposure." Refer to the handout for a list of CO hazards in the home, workplace, and environment.

- Try to obtain information about when and where they may be exposed to CO sources--at home, at work, or anywhere in between.

3. If they know of a probable source, ask them if they have tried to address the source, e.g. fixing the furnace or speaking with someone at work, if it's a work site exposure.
   - If they have tried to address the source, provide support for their efforts.
   - If not, and the problem is at home, help them describe the *benefits* of addressing the problem and disadvantages of not addressing the problem, and then let them weigh their choices.
   - If not and the problem is at work, report the issue to the onsite Industrial Hygienist or other appropriate staff to notify management.

4. Emphasize project recommendations: "SafeWell is working with the company union and management to maintain workers' safety at work."

General talking points

What is the margin of error? Plus/minus 5%.

Could a reading of around 6 ppm CO be caused by a leaky furnace or another problem? It is possible, but not likely. I would consider 6 ppm to be at the high end of normal and not something to be greatly concerned about. You can try taking another CO Analyzer reading a little later.

If I call the Gas Company to come and check my furnace, will they charge me? I'm not sure. It may be worth a call to the gas company to ask them if they have a procedure for people calling with concerns about carbon monoxide and to request a copy of the brochure or have them explain the procedure. Furnaces and indoor heaters should be serviced periodically, usually once a year. Regular maintenance is the best way to prevent problems. It's also a good way to save on fuel costs by keeping the efficiency of your furnace as high as possible. When you have your furnace serviced, that's a good time to ask your heating company about potential CO concerns for your particular heating/cooling system.

How long does the CO stay in my system, and how quickly does it leave my body? CO has a half-life in the body of about 4 hours. That means that starting with any level of CO in the body, half of it will be gone 4 hours after the exposure stops (¼ will remain after 8 hours, 1/8 will remain after 12 hours, etc.)

Why is the CO reading low or normal if I smoke? It could be that the smoker may not have had a cigarette in the last 8 or 10 hours or the machine may not be functioning properly.

Why is my CO reading high and I don't smoke? There are many possible explanations. A non-smoker may be getting exposed to another CO source (see table below) or the machine may not be functioning properly.

I was at a party last night with lots of smokers - will this show up on my reading? Will second-hand smoke exposure lead to detectable readings on the CO Analyzer? Not likely, since two or more half-lives will have passed already, leaving 1/8 or less of the CO level when you left the party. While you will breathe in CO in second-hand smoke, it's still a lot less than you would breathe through direct smoking. Studies show that second-hand smoke may elevate non-smokers' CO somewhat.

How does holding one's breath affect the CO reading? The person being tested is asked to hold his or her breath so that any CO present in the body can build up temporarily in the lungs and make it easier to measure. If someone holds their breath longer than the prescribed 15 seconds, it may elevate their reading. Conversely, if someone holds their breath for shorter than the recommended 15 seconds, it may decrease their CO reading.

Does air pollution affect CO level? It can, if CO is one of the air pollutants that the person is exposed to, and the exposure was within the last few hours or so (half-life considerations). For the general population, sitting in a lot of traffic can raise your CO level because automobile exhaust contains CO. As an extreme example of this, automobile tunnel attendants (the people sitting in the little booths inside the tunnel) get elevated CO levels if they do not have a supply of fresh air.

Does a low CO reading mean I don't have to worry about air pollution? Unfortunately, no. Air pollution can contain many different toxic agents, depending on the source. For example, automobile exhaust can contain lead, oxides of sulfur and nitrogen, and particulates. These would not be detected by the CO Analyzer.

Can a person's stress level affect CO readings? Not likely, unless they are so stressed that they don't breathe deeply and can't perform the test properly. This would be an effect only on the measurement process; stress does not directly change CO levels in the body.

Do allergies affect CO readings? No, not likely.

At what level should a non-smoker be worried if they have no recognized sources of CO exposure? This is not a sign of immediate danger. There are many possible ways to be exposed to CO. Let's look at the table (or refer participant to their health care provider.)

Can CO level be affected by adhesives or paint used on the job or in the home? Yes. Methylene chloride may be used in some adhesive systems and it is widely used as a paint stripper. Methylene chloride is absorbed through the skin and by breathing. It is metabolized into CO once it's inside the body. See the table below for possible control measures. It is in some paints. More commonly, it's in cleaners and paint strippers.

What other chemicals can elevate CO levels (on the job or in the home)? Methylene chloride is the only one (unless equipment is being thrown off calibration by some other chemical.)

What is organic fuel? Organic means that a fuel was made from something that was once alive (plants usually). For example, the common fossil fuels are made from plants, oil, natural gas, propane, gasoline, and kerosene. Wood is an organic fuel from trees. It can also be defined as a fuel containing carbon.

What kind of engines can generate CO? Engines that burn organic fuels can generate CO in the exhaust. An oil or wood fire produces smoke containing lots of CO and other things. Similarly, engines burn fuel more completely, but they also generate exhaust that contains CO. Electric motors do not generate CO because they use electricity as an energy source, rather than organic fuel.

How can a portable space heater give off CO? Many portable space heaters generate their heat by burning organic fuels. For example, propane is a common space heater fuel. Propane space heaters burn efficiently, but still can lead to CO problems if they are not properly operating and properly ventilated. Electric space heaters do not generate CO.

What's a compressor? A compressor is a machine that compresses air, the compressed air is used to run certain tools or other machines. Examples include pumps, commercial spray painters, and jack hammer(s). Some compressors are powered by organic fuels, such as propane, to generate pressure, and thus can be a CO source.

Carbon monoxide hazards in the workplace, home, and environment	
Sources	Solutions
Tobacco smoke From directly inhaling cigarette, cigar, or pipe smoke From passively inhaling cigarette, cigar, or pipe smoke	Tobacco smoke Don't smoke If you smoke, do not expose others to your smoke Advocate for strong workplace smoking policies
Burning organic fuels Exhaust from engines that use organic fuels, especially when used indoors or in an enclosed space From vehicles, such as trucks, cars, and fork lifts From other machines with engines, such as compressors and portable pumps From cooking equipment, such as gas stoves and ovens From heating equipment, such as furnaces, wood burning stoves, and portable space heaters	Burning organic fuels Don't run engines in enclosed buildings Always ensure good ventilation when using engines indoors Don't sit in a parked car with the engine running Keep engines tuned up Check your car exhaust system Have your furnace checked Consider a CO monitor for your workplace or home (~$50) CO monitors sound an alarm before the gas reaches toxic levels
Other chemicals Your body can make CO from methylene chloride Methylene chloride is a solvent commonly used as a degreaser and furniture stripper You can absorb methylene chloride by breathing or through your skin	Other chemicals There are safer substitutes for many uses of methylene chloride If methylene chloride must be used, proper ventilation must be installed Respirators should be your last line of defense against methylene chloride

Tie-in with management initiatives

This activity is a good way to initiate a company-wide smoking policy designed to reduce or eliminate on-site smoking, or to identify potential areas of CO exposure in a worksite. Smokers need sufficient notice to get information about quitting and consider the right method for them. This activity also provides awareness of the harmful effects of CO exposure from other smokers and also from occupational exposures.

Incentives for participation

- Raffle tickets

Promotion

- Posters
- Announcements at meetings
- Payroll stuffers
- Email
- Overhead paging
- Flyers
- Table Tents

Evaluation

- True/False quiz for knowledge
- Count participants for tracking
- Count hours for tracking (including prep and clean up)

Program C: "Label Lingo"

Description

The focus of this session is to help workers understand and use labels on food packages, cigarette packaging, and hazardous materials to take steps that may reduce their health risk. Worksite coordinators may wish to offer these sessions in conjunction with contests as suggested below. The session includes:

- Food and Drug Administration (FDA) requirements for packaged food and beverage labels
- Definitions of common terms used on food labels
- How to identify fat, carbohydrate, fiber, vitamin A and C content of products from food labels.
- Ingredients found in tobacco products (tar, nicotine, and hazardous substances)
- Ways to get information about hazardous materials: MSDS (Material Safety Data Sheets) and Chemical Labels

Notes to the facilitator

- Bring food package labels, a sample cigarette pack, and a copy of an MSDS and chemical label for materials that are used in the site.
- This session could be taught as two sequential sessions, if the subject matter requires more time.
- Note Optional sections.
- Reference: "Label Facts for Healthful Eating: Educators' Resource Guide," by Mona Boyd Brown, RD.

Supplies

- Small can of Crisco and small paper plates
- Name tag for instructor
- Food package labels to illustrate health claims and the Nutrition Facts label
- Fat-free crackers and fat-free cream cheese
- Cigarette packages with at least tar and nicotine contents and maybe ingredients

Forms needed

- Instructor evaluation
- Participant evaluation
- Attendance form

Facilitator's Guide for Label Lingo

Introduction

1. Welcome participants to the SafeWell Series.
2. Ask everyone to sign the Attendance Form.
3. Ask if anyone would like to briefly describe the SafeWell project. Reiterate the SafeWell mission as necessary.
4. State the objectives for this session.
5. Distribute the handouts, pencils and cards.

Activity: Understanding food labels

Q: How many of you read labels on food packages? Do you understand them? Do they help you choose foods?

Q: Have you noticed that the information has changed?

- Since the middle of 1994, food labels with nutrition information have been required by the F.D.A. on almost all packaged foods.
- Health claims have to be substantiated now. If a manufacturer labels its products with words such as "fat free" and "low sodium", the foods have to meet certain criteria. For example, "fat-free" means that 1 serving of that food has to contain less than half a gram of fat per serving. (Note that sometimes the serving size is reduced so that the item can meet the criteria.) "Fat-free" used to mean less than 1 gram per serving.

Q: What information can you get from a food label?

- Nutrition facts: Certain nutrients (fat, cholesterol, sodium, carbohydrates, and protein) must be listed by weight in grams per serving. (1 oz = 30 grams)
- Vitamins and minerals: Only vitamins A and C, calcium, and iron must be listed on the food label. Food companies have the option to list other vitamins and minerals that are in the food.
- Serving size.: This is now standardized for similar foods to make it easier to compare foods. For example, always compare the label serving size with the amount you actually eat.
- Daily values: The government has determined that the *reference diet* contains 2000 calories per day. Depending upon gender, body size and activity level, people need more or less than 200 kcals per day, and they will have to adjust the amounts accordingly.
- The % daily value: This tells you how much (by percentage) the nutrients in this food contribute towards a 2000-calorie diet.

Q: Does anyone happen to know what his or her caloric needs are?

- The number on the label is an average for adults. Your own calorie needs may be either less or more than the Daily Values on the label, depending on your gender, height, weight and physical activity.
- Ingredient information**:** Food manufacturers are required to list all ingredients by weight from the most to the least. For example, a canned soup that has tomatoes listed first on its ingredient list means that it contains more tomatoes by weight than other items in the ingredient list.
- Only seven types of health claims are permitted on food labels under the new legislation.

Q: Can anyone name one?

- Health claims link a food or food component (fat, fiber, vitamin C) to the risk of a disease or health-related condition, and are based on solid research results. Examples of health claims are:
  - Eating enough calcium may help prevent osteoporosis (thin, fragile bones).
  - Limiting the amount of sodium you eat may help prevent high blood pressure (hypertension).
  - Limiting the amount of saturated fat and cholesterol you eat may help prevent heart disease.

Q: What about the labeling requirements for meat and poultry products?

- Nutrition labeling for single-ingredient raw products, such as ground beef and chicken breast, is voluntary. For processed products--such as chicken franks, corned beef, and frozen entrees with meat or poultry--nutrition labeling is a MUST.

Q: What about the labeling requirements for fresh food?

- Most fresh supermarket foods, such as raw fruits, vegetables, and fish do not carry labels although the nutrition labeling law asks supermarkets to provide voluntarily the nutrition information for the 20 most commonly eaten raw fruits and vegetables and seafood. You may find the information listed in your local supermarket or on grocery bags.

Optional activity: What words mean

Words	What they mean
“Good source" "Contains" "Provides"	Contains 10-19% of the daily value per serving
"Excellent source of" "High" "Rich in"	Contains 20% or more of the daily value per serving.
"More" "Fortified"	Contains at least 10% more than the daily value for

"Enriched" "Added"	protein, vitamins, minerals, dietary fiber, or potassium per serving.
"Fiber"	Any food making a fiber claim must meet the requirements for a "good source" or "high" claim; must declare the level of total fat per serving if food is not "low fat".
"Lean"	Packaged seafood, game meat, cooked meat, or cooked poultry with less than 10 grams total fat, less than 4 grams saturated fat, and less than 95 milligrams cholesterol per serving.
"Extra lean"	Packaged seafood, game meat, cooked meat, or cooked poultry with less than 5 grams total fat, less than 2 grams saturated fat, and less than 95 milligrams cholesterol per serving.
"Fresh"	Raw food that has not been frozen, heat processed, or similarly preserved.
"Fresh frozen" "Frozen fresh"	Food quickly frozen while very fresh.

Activity: Spoon-out-the-fat demonstration

Have each participant choose a food label. Ask them to read their label for total fat, then change grams of fat to teaspoons of fat (5 grams of fat = 1 teaspoon). Ask them to spoon out from the Crisco can the teaspoons of fat per serving, and the teaspoons of fat for the serving they would eat.

- Q: If you had 65 grams of fat (13 teaspoons or less), to "spend" in the entire day, is this what you would want to spend it on?
- Q: Can you think of lower fat foods you might substitute for higher fat foods?

Have participants read their labels and discuss them.

Select 2-3 people to report their findings from the activity

Activity: Tobacco

Some points to make about cigarettes (and other forms of tobacco):

- Where's the Label? Tobacco products are an exception to most of the consumer goods we buy: currently they have no labels to tell us what the ingredients are, though that will be changing soon based on recent legislation. This issue is in the courts right now; some states are trying to require cigarette manufacturers to list ingredients.

- Cigarette packages do have information on two chemical ingredients in tobacco: tar and nicotine. You all are familiar with tar; it can cause cancer in your lungs. Nicotine is the substance that makes tobacco addictive. Tar and nicotine levels can differ by brand name: (refer to cigarette packs you brought). One thing that tobacco companies have done is to increase the nicotine content in cigarettes when they lower the tar level, keeping people addicted and smoking.

Activity: OH Material Safety Data Sheets

Q: When you work with chemicals, are there labels to tell you what's in the chemical?

- Sometimes you may see a label on a chemical barrel or container, but many times you won't. However, there is a way that you can find out the ingredients in any chemical at your workplace. It's called the Material Safety Data Sheet, or MSDS, and it is required by law for every chemical that your company buys or uses.
- You should be able to access MSDS at your worksite, but they are not typically stored with chemicals you might be using.
- Another source of information about chemicals in your workplace are chemical labels. Chemicals should be labeled right on their containers. A good label will tell you which hazardous ingredients might be contained in the product, what the hazards are, and what to do in case of emergency. In summary, there are many ways to get information about hazardous materials, including MSDS and labels. It's important to remember that print sources are not the only way to get information.
- Optional(as time allows)
  - Hazard Communication or Right-to-Know is a workplace law that says workers have a right-to-know the hazards of the materials they work with and how they can protect themselves.
  - (This law was passed by OSHA, the United States' Federal Occupational Safety & Health Administration)
  - Haz Comm, short for Hazard Communication, says by law that workplaces need to keep MSDS on file and accessible to employees.
  - Haz Comm also says that employers must have a labeling system for chemicals used in the workplace.
  - Additional SafeWell sessions are available to your workplace for more in-depth learning about MSDS and other sources of hazard information and control
- Optional (as time allows):
  - Another label that you might see directly in a product or on the door to a room is the multi-colored NFPA diamond.
  - NFPA stands for the National Fire Protection Association.

- These are hazard labels that were developed mainly for emergency responders, such as firefighters.
- NFPA diamonds can also be useful in raising day to day hazard awareness.
- The NFPA diamond has 4 sections.
- The top section, in red, rates flammability hazards (4 is the worst).
- The left section, in blue, rates health hazards (4 is the worst). Importantly, this only addresses short-term hazards, and does not include long-term hazards such as cancer. This is one of the limitations of day to day use of the NFPA diamonds. This is why you need to look at MSDS and other sources of information to get the full picture.
- The right section, in yellow, rates reactivity hazards (4 is the worst).

Activity: Taste Test

Fat-free crackers or bagel pieces (baked) and low-fat or fat-free cream cheese.

Activity: Spread the Word

- Spread the word to your co-workers (or colleagues) and bring one of them to the next session.
- Share what you have learned with your family. Show them how to read the labels on food packages.
- Choose a food from the cafeteria or vending machine and read the label to determine its fat and dietary fiber content.
- Find out where MSDSs are kept for your department. Look up one of the chemicals that you have in your work area.

Home activities

- Set a goal: Look at labels on at least 3 foods the next time you are in the supermarket.

Conclusion

- Promotion for other sessions: Encourage participants to attend other SafeWell sessions
- Please complete and return the evaluation form
- Any questions?

Appendix 2: Workplace health promotion and health protection tools and resources

Total Worker Health

Total Worker Health is a program of the National Institutes of Occupational Safety and Health. Its goal is to sustain and improve worker health through better work-based programs, policies, and practices. The site provides extensive background information, while its related site, "Essential Elements of Effective Workplace Programs and Policies for Improving Worker Health and Wellbeing," (http://www.cdc.gov/niosh/TWH/essentials.html) provides detailed guidance on program design, implementation, and evaluation for employers and employer-employee partnerships. http://www.cdc.gov/niosh/programs/worklife/default.html

The Community Guide to Public Health

The Guide to Community Preventive Services is a free resource from the Centers for Disease Control and Prevention, to help identify programs and policies to improve health and prevent disease in communities. Systematic reviews are used to provide evidence-based recommendations. The contents are searchable by disease/condition and also by "worksite." See http://www.thecommunityguide.org/worksite/index.html for workplace health promotion topics. http://www.thecommunityguide.org/about/index.html

RTIPS (Research Tested Intervention Protocols)

RTIPs is a searchable database (available at http://rtips.cancer.gov/rtips/index.do) of cancer control interventions and program materials and is designed to provide program planners and public health practitioners easy and immediate access to research-tested materials. Search criteria include setting, ethnicity, age, gender, and topic area. There are currently 11 programs listed for the workplace setting. This site links to "Using What Works," (http://cancercontrol.cancer.gov/use_what_works/start.htm), a train-the-trainer course that teaches users how to adapt a research-tested intervention program to the local community context.

Promoting Wellness at the Worksite: Employer Toolkits

This is a collection of Employer Toolkits from the Philadelphia BlueCross/Blue Shield. The toolkits are do-it-yourself health improvement and education programs that any team or an individual in your organization can implement. Each toolkit has everything you need to implement a program, including a toolkit guide, program guidelines, promotional flyers, registration forms, a participant welcome letter, certificates of completion, and program evaluation forms. (Contents may vary depending on the challenge or education program topic.)
http://www.ibx.com/worksite_wellness/employer_toolkits/index.html

Chapter 4: Evaluation and continual improvement

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Chapter overview

The evaluation and continual improvement components of the SIMS cycle include activities to analyze the results of the SafeWell program, determine whether goals and objectives are being met, identify what has been successful and what still may need improvement, and provide information for future decision-making. Typically, evaluation occurs at different points throughout the program.[1, 2]

It is important to set specific goals for the evaluation, then to choose tools to match and measure progress toward them. The organization may want to focus on one purpose or objective, or may want to focus on different ones over time. "Chapter 2: Program Planning" includes a discussion of strategies for choosing goals, objectives, and specific tools for the assessment process that may be helpful in preparing for the evaluation phase of SafeWell also.

This chapter covers:

- Purposes of evaluation
- Strategies for evaluation
- Existing evaluation resources and tools—from simple to comprehensive

Purposes of evaluation

The descriptions below of the purposes of evaluation are summarized from Pronk and the Institute of Medicine (IOM).[3, 4] These references summarize the purpose(s) of evaluation as being for:

- Accountability
- Decision-making
- Improvement
- Surveillance, including longitudinal analyses and knowledge discovery

Evaluation for accountability

A basic purpose of evaluation is to assess whether the program implemented has resulted in desired changes, goals/objectives being achieved, or whether there has been progress toward meeting such goals. For this type of evaluation, organizations may focus on only a few vital measures, tightly linked to program objectives. These results may need to be reported periodically to management and/or outside funding/investor sources for accountability purposes, so it is important that the measures be valid (i.e. truly measuring the change) and reliable (i.e. able to measure the change consistently/repeatedly).

Evaluation for decision-making

Evaluation for decision-making purposes uses data that contribute to an understanding of program costs and benefits, prioritization of goals and objectives, and need and demand at the worksite.[3] For example, drivers of health care costs, units with elevated health and safety hazards, and findings from employee needs and interests surveys may influence decisions about the types of programs or policies offered at the workplace. Examples of tools to assess these topics are provided in "Chapter 2: Program Planning."

In order to make decisions about future efforts and resource allocation, managers need timely, valid, and reliable data tailored to meeting objectives. The evaluation of data for decision-making should be based on management/organizational schedules for review or major decisions (often annually). There may also be a need for data to estimate future states, such as anticipated returns on investment. [4]

The SIMS Steering Committee (see "Chapter 1: Providing the foundation"), including employee representatives, could be involved in decision-making, as well as in reporting decisions to the broader workplace population. Ultimately the decision has to be made about the extent to which the SafeWell program has been adequately implemented, is suitable for the organization, has been effective, and how it may be continued and improved. Management review of the appropriate data leads to this kind of decision-making.

Evaluation for improvement

Data that can impact improvement often point to barriers, opportunities, and other process-related issues that can affect programs and people. Measurements for this type of data should be simple, easy to implement, and reported frequently. The Plan-Do-Study-Act cycle of planning a change, implementing it, and studying and acting upon the results is a good example of this evaluation for improvement.[4] For instance, as part of the assessment and prioritization process (see "Chapter 2: Program Planning") an organization will focus on developing one or more priorities. These priorities may be determined from data that the worksite collects that have identified the problem(s). A program can be introduced that addresses priorities chosen, the process of program implementation may be tracked, and whether change has taken place may be measured

after a period of implementation. If barriers to program implementation arise, an organization can determine whether any mid-course corrections need to be made to improve the program, leading to the process of continual improvement.

A real-world example of evaluation for improvement is provided by Dartmouth-Hitchcock Medical Center (D-H) in Lebanon, NH. It is included here as a case study of how a large health care organization has tried to improve the health of its workforce using an integrated approach by targeting "at-risk departments"–i.e., those units where needs are the greatest–with the support of its Live Well/Work Well Program. D-H has used principles of continual improvement in its implementation of Live Well/Work Well.

Case study: Evaluation for improvement at D-H

Using data about at-risk units/departments as an opportunity to improve worker health

The Dartmouth-Hitchcock Medical Center (D-H) launched its Live Well/Work Well (LWWW) program in 2009 with the vision of achieving the healthiest workforce possible. LWWW is a comprehensive program that integrates occupational safety and health (OSH), worksite health promotion (WHP), and disease management. As an example of its integrated approach to worker health, this case describes how D-H has coordinated a traditional OSH strategy of incident reporting (a data collection effort) with providing opportunities to improve the health and well-being of workers and their departments through programming, evaluation, and continual improvement. This approach to focus on integrated interventions is based on the likelihood that work areas with high levels of work injury probably also carry higher levels of workplace stress and have employees with lifestyle risk factors influenced by the work environment.

Foundational precepts of LWWW

The LWWW program's foundational precepts are that a healthy workforce is a safer workforce and a safe workforce is a healthier workforce.

Collecting the data: D-H incident investigations

The purpose of an occupational safety and health (OSH) incident investigation is to identify specific locations and work activities that pose the greatest risk to employees in terms of injuries and illnesses, and to target needed corrective action effectively. At D-H, the data is collected through an on-line electronic Employee Report of Injury and Near-Miss Reporting System (EROI). This system encourages employees to report near-miss incidents at the time of occurrence on a form called a "Yikes Report." On-the-job employee injuries or illnesses are also reported on-line and referred to as "Ouch Reports." All incidents meeting certain thresholds receive an immediate review by the D-H Safety and Environmental Programs (SEP) Department and then are triaged for a follow-up assessment based on severity.

Analyzing the data and prioritizing for greatest need

The incident data and other data (e.g. Liberty Mutual's Loss Prevention Report) assist the SEP in tracking trends by workgroup, supervisor, shift, and job-type. The SEP uses this

data to identify "at-risk" units/departments[1], which are defined as a rate of work-related incidents (injuries, illnesses, and near misses) that exceed the OSHA recordable rate at D-H. "At-risk" departments are identified then as targets for an integrated intervention. In 2010, about 90 percent of all incidents occurred in 10 percent of D-H departments.

Implementing follow-up action for "at-risk" departments

After a department has been determined to be "at-risk," the SEP posts the information electronically on an intranet site and sends a written communication to that department's director. The letter provides a summary of incident rates for all "at-risk" departments in D-H. The department is expected to partner with LWWW in a comprehensive assessment of work environment and organizational factors influencing health, and an action plan aimed at both eliminating or mitigating hazards, and improving overall health and well-being.

After the initial written communication, a one-on-one meeting is organized by the SEP with each "at-risk" department director. The department's incident profile and preventive programs and procedures are presented and discussed. In addition, the SEP explains specific follow-up activities to be launched for the department that follow a comprehensive approach to protect the safety, health and well-being of employees. The approach addresses both OSH and WHP at environmental, organizational and individual levels. The activities aim to support the process of continual improvement through infrastructure development; data collection, analysis, and prioritization; program implementation; and rating the effectiveness of corrective action. Specific activities that occur in conjunction with the SEP include:

- **Infrastructure development:** Identifying a department champion to spearhead the unit's OSH and WHP activities. This champion will participate in a department-based OSH-Wellness Committee including leadership and non-leadership staff members. The Committee will meet quarterly at the D-H Partners in Health, Environment, Wellness and Safety (PHEWS) Committee to address and share the department's successes and challenges. .
- **Data collection:** Tracking incidents on a quarterly basis and helping the SEP Office conduct investigations to identify the root causes of incidents and level of specific risks.
    - Conducting industrial hygiene surveillance: Focused exposure assessment evaluations such as job hazard analyses and exposure surveys can identify, evaluate, and control employees' exposures to chemical, physical, and biological hazards.
    - Improving incident reporting and providing rate-based injury data to better compare outcomes.
    - The EROI prompts a comprehensive investigation of work environment and organizational factors that influence workgroup health (personal and occupational).

[1] An "at-risk" entity can be either a unit (e.g. an in-patient area such as orthopedics), or a department (e.g. engineering) that spans the entire hospital. For the sake of brevity, the term department will be used to connote an "at-risk" unit and/or a department.

  - The EROI prompts a referral to individual and population health promotion as well as health protection

- **Implementation:** Conducting focused corrective actions to mitigate unit exposure risks. SEP provides assistance in the development of alternate work opportunities for injured staff.
  - If an employee goes to the OSH clinic at D-H because of a work-related injury or illness, s/he is also assessed for, and when appropriate referred to, LWWW behavioral health and lifestyle coaching resources.
  - Supporting the funding of equipment and projects aimed at occupational injury reduction and increased wellness.
  - Facilitating and scheduling staff participation at OSH-Wellness education classes.
  - Providing specific LWWW resources including EAP consultation, health coaches, tobacco cessation, work-family life balance initiatives, stress management, and environmental changes such as access to more nutritional food options, and exercise opportunities and access to fitness and wellness centers.
  - Having D-H supervisory staff, directors, managers and supervisors attend the D-H Supervisor's Safety and Workability Responsibilities Course, focusing on supervisor responsibility of their safety responsibilities.
  - Communicating risks effectively to "at-risk" departmental supervisory staff to improve awareness and recognition of unsafe conditions and activities
  - Ensuring all levels of staff participation, buy-in, and accountability, and communicating that opting out by staff is not an option.

Evaluation and continual improvement

Each year, the goal is to reduce the number of "at-risk" departments without compromising incident reporting. D-H incident reporting has more than doubled since 2008. Evaluation and continual improvement strategies further help address this goal and include:

- Evaluation: Organizing an independent follow-up audit upon the "at-risk" department's request but not less than 12 months from the implementation of corrective action.
  - Evaluating activities by having the "at-risk" department director, in collaboration with the "at-risk" department's OSH-Wellness Committee, regularly review the effectiveness of corrective actions in reducing incidents.
- Continual improvement: Rating of the effectiveness of corrective action occurs, and is acted upon as necessary.

Evaluation for surveillance

On-going surveillance of worksite trends and the health of workers, or discovery of new knowledge, require more extensive and longitudinal evaluation expertise. Precise, reliable, and valid measures are time intensive and may be expensive, but have the potential to lead to new knowledge.[4] The types of data that might be collected over

time include: health outcomes; trends in injuries; OSHA claims; and effects of policies and programs on long-term worker productivity, absenteeism, and disability management.

Strategies for evaluation

Form an evaluation team

The National Institute for Occupational Safety and Health (NIOSH) recommends forming a team to plan the evaluation, and suggests including workers as key sources of information about a worksite.[2] Such a team could be one of the working groups described in "Chapter 1—Providing the foundation." NIOSH further suggests that the team include those who will be affected by the program, those responsible for implementing it, and those responsible for making decisions about its future.[2]

Be clear about the intended audience for the program and the evaluation

Programs and communications should be tailored for the audiences. It is important to report on decisions about the program and results of the evaluation to the entire worksite community. This may mean different types of communications for different audiences. Managers may be more interested in returns on investment, while workers may be more interested in changes in benefits, health, and well-being.

For the SafeWell approach--evaluate all levels of worksite health programs, and all topics contributing to worker health and well-being

The SafeWell approach to worksite and worker health encourages multi-level programs to occur, so it is important to evaluate progress of all programs, e.g. physical environmental changes; organizational policies, programs, and practices; as well as individual risk reduction behavior. Similarly, progress related to worksite health promotion, occupational safety and health, and the psychosocial work environment and employee resources may be evaluated. Coordinated and comprehensive reviews across departments can assist with this, as can an integrated data management system (see below).

Consider integrated data management

An integrated data management system is one that coordinates data collection, management, and analysis throughout the organization. Such a system can be challenging to organize and implement, but as the IOM reports, one of its strengths is systematic data collection that allows for data integrity and consistency.[3] It also has the potential benefit of providing a comprehensive view of organizational issues and whether attempts to address them have been successful.

Although an organization may not yet have an integrated data management system, it is a step worth considering to understanding better how the various components of worker and worksite health and safety interact. Such a system can help to identify at-risk populations or units, low-risk populations, and assist in predictive modeling.[3] One step

toward achieving an integrated system is through data warehousing—a trend in data management that coordinates existing databases throughout the organization with common measures.[3] Some examples of data elements for such databases include: health behaviors and risk factors, medical and pharmacy expenses, productivity indicators, quality-of-life indicators, environmental policies and factors, and program participation.[3] Data and software need to be standardized and measures to protect data security and confidentiality need to be assured. The implementation of such a system requires management commitment and support. The goal of such a system, as described by the IOM, "is to drive collection of universal and reliable data that will satisfy common program goals and ensure that information obtained is meaningful to all participants."[3]p.153

An organizational framework for integrated data management is discussed by the IOM, and may be helpful for identifying specific data collection purposes and strategies. See page 154 at: http://www.iom.edu/Reports/2005/Integrating-Employee-Health-A-Model-Program-for-NASA.aspx (a free PDF download). This framework can provide the basis for an organizational scorecard that tracks progress of the specific measures deemed important and relevant to any organization.

Even if the organization is not quite ready to integrate its data, the principle of cross-departmental thinking about reviewing data and addressing problems can be applied. Data may be collected separately by department, and then discussed and addressed across function by representatives from multiple departments. For instance, if a hospital finds its injury rates are particularly high in some units, representatives from the Divisions of Occupational Safety and Health, Worksite Health Promotion, Facilities, and Human Resources may all be able to review the data and suggest creative ideas to address the problem comprehensively.

Consider including process and outcome measures

While the specific measures for evaluation are dependent upon organizational priorities, goals, and objectives, the IOM maintains that measures concerning program reach, participation, and satisfaction should also be included.[3] These are usually regarded as process measures, but can in and of themselves sometimes be outcome measures, as well. Here are some basic factors to consider measuring:

- Reach: Extent to which the intended audience was reached
- Fidelity: Extent to which the program/policy was implemented according to plan
- Participation levels in policy and program efforts
- Desired outcomes: Extent to which program achieved desired outcomes
- Return on investment or cost-effectiveness

Process measures are important for understanding if the program was implemented correctly and outcome measures are important for measuring program effectiveness. Some outcome measures that might be of interest to employers and employees are health outcomes, health care costs, worker productivity, and organizational change. Health

assessments, employee health and interest surveys, and JourneyWell's Dimensions of Corporate Wellness scorecard (see Chapter 2 for discussion of these) are tools to help assess some of these measures.

Further descriptions of process and outcome measures are available at the Centers for Disease Control and Prevention's website on Workplace Health Promotion Evaluation, available at: http://www.cdc.gov/workplacehealthpromotion/evaluation/index.html.

Consider predicting costs and benefits and/or return on investment (ROI)

Data comparing the costs of the program to current and projected health care costs might be helpful for decision-making about whether to continue a program. An offshoot of this is a frequently discussed measure called Return on Investment (ROI). Basically, ROI is the amount of dollars earned or saved for every dollar invested.[5] As most managers will want to know the value received for resources allocated, an ROI is one measure to consider. A useful publication on ROI from the Wellness Council of America (WELCOA) is available at: http://www.welcoa.org/freeresources/pdf/0110newsviewsgoetzel.pdf In order to predict an accurate ROI for the SafeWell integrated program, safety and health costs would also need to be included. An integrated ROI does not currently exist.

Choose milestones that are short-term as well as long-term

It is important to include both short- and long-term outcomes in the evaluation. Maintaining and improving worksite and worker safety and health can be a complex effort that may take a few years to reap rewards. However, management may want to see concrete positive outcomes within a year, or it may pull its support. Hopefully, top managers who have embarked upon using comprehensive worksite health programs understand it is a long-term commitment. Nevertheless, it is wise to include some milestones tied to short-term objectives that are achievable and can produce short-term success. Short-term successes can support further employee and management engagement. Some examples of short and intermediate-term milestones could include:

- The process of establishing workplace health programs, policies, benefits, or environmental supports
- Employee awareness of and satisfaction with programs and services and those that provide them
- Participation in and use of programs and services
- Changes in employee health behaviors and risk profiles
- Formation of a SafeWell integrated working group consisting of different levels of employees and reports of their activities
- Implementation of a plan to reduce back pain that incorporates organizational as well as individual approaches

Incorporate an evaluation component into each phase of the SafeWell cycle

Although this chapter comes after those on decision-making, program planning, and implementation, it does not mean that planners need to wait until the end of the program to conduct evaluation. It is more useful to think about how to evaluate programs and the SIMS in the beginning of adopting the SafeWell approach, as well as along the way. That will provide opportunities to celebrate successes and make mid-course improvements if necessary.

Make evaluation part of program delivery

In the spirit of conducting on-going evaluation to support continuous improvement, evaluation may be linked to program delivery. For instance, process measures, such as how many employees participated in a Health Risk Appraisal (HRA), are often linked to the delivery of that activity. When an employee completes an on-line HRA, that completion can be tracked. If a 65% HRA completion rate is desired, progress toward that goal may be noted by tracking the process measure of HRA completion.

Conduct evaluations that are efficient, financially viable, and meaningful*[3]*

It is important that information collected in the evaluation is used. A meaningful evaluation will be aided by careful planning, with an eye toward having consensus from all program stakeholders as to the purpose and expectations from the evaluation. An efficient evaluation will then focus on evaluating those items that are most pertinent to the organization, and that are reflected in its goals and objectives. Using an integrated approach to data collection and management may also increase the efficiency of the evaluation, as was discussed above.

Also important to know is what the evaluation resources are. These should be included when considering the overall cost of the program. For instance, is there in-house expertise for the type of evaluation desired? What will the health appraisal cost, in terms of time and effort? Are resources needed for extra communications efforts and incentives for survey participation? Some may want to consider having an outside consultant or vendor evaluate the program. See “Chapter 2: Program planning” for information on outside vendors.

Incorporate the following recommended strategies during the evaluation process

There are a few strategies that are important to consider when reviewing and addressing evaluation results.[6]:

- Through the measurement and monitoring process, if safety and health incidents are discovered, they should be investigated.
- Audit the evaluation process periodically to ensure that procedures and information collected are standardized and appropriate.
- Ensure the employees and management participate in the process. One way to is to solicit suggestions for corrective and preventive actions and feedback on the planning process.

- Communicate results to all levels of management and employees.
- Celebrate successes and the responsible individuals and groups.

Existing program evaluation resources

Unfortunately, there does not seem to be one evaluation that is all-inclusive of the SafeWell approach to worksite and worker health. The closest is probably the Corporate Health Achievement Award (see below). However, some of the following may be adaptable.

Penetration, Implementation, Participation, and Effectiveness (PIPE) Impact Metric

The PIPE impact metric provides a score to measure the impact of a worksite health promotion program. The following example comes from Pronk's work that has been referenced in the IOM book (page 135).[3]

Table 3—PIPE Impact Metric

Variable	Definition	Rate Calculation	Coefficient
Penetration	Proportion of target population reached	10,000 of 10,000 employees reached = 10,000/10,000	1.0 (100%)
Implementation	Degree to which program was implemented according to plan	After review, staff concludes 80% of workplan was implemented	0.8 (80%)
Participation	Proportion of invited employees who enroll in program	2,000 employees enrolled = 2,000/10,000	0.2 (20%)
Effectiveness	Rate of successful participants. Criterion is set prior to program implementation and is related to goals and objectives	1,500 participants successful--1,500/2,000	0.75 (75%)
PIPE impact metric	Overall program impact score	1.0 x 0.8 x 0.2 x 0.75	0.12 (12%) improvement

The PIPE impact metric has been scored and reported using program implementation data, but no normative benchmarking data are currently available. [3] Nevertheless it is a relatively simple metric to measure and calculate and may be helpful as an evaluation tool. Although it has been used for health promotion programs targeting individuals, it might be adapted to include safety and health, as well as other organizational/environmental level programming and practices.

Corporate Health Achievement Award (CHAA)

Although not strictly a program evaluation tool, sometimes tools that have been developed for different organizational awards processes may serve a similar purpose. The CHAA has been developed by the American College of Occupational and Environmental Medicine to "recognize organizations with exemplary health, safety, and environmental programs," available at http://sa.chaa.org/. Organizations conduct a comprehensive review of the following areas: leadership and management, healthy workers, healthy environment, and healthy organization. There is a free on-line self assessment that organizations may utilize to evaluate themselves against CHAA standards as well as to benchmark themselves against award recipients and other organizations like themselves.

NIOSH's Guide to evaluating the effectiveness of strategies for preventing work injuries: How to show whether a safety intervention really works

While this document is about evaluating safety interventions, it is also a in-depth primer on evaluation. It includes information on effectiveness evaluation, planning, evaluation designs, sampling techniques, measurement, qualitative methods, and statistical methods. Though focusing on injury, its recommendations apply to any evaluation of a worksite program. It is an important document to consider if the purpose of an organization's evaluation is for research such as surveillance, and knowledge discovery. The document is available at: http://www.cdc.gov/niosh/docs/2001-119/

NIOSH's How to Evaluate Safety and Health Changes in the Workplace: Does it Work?

While the NIOSH guide mentioned above is quite comprehensive in its description of evaluation, NIOSH used it to serve as the inspiration for a much shorter and simpler guide about evaluation that includes recommendations for evaluation, descriptions of actual worksite evaluations, and a couple of tools that worksites might use. It is available at: http://www.cdc.gov/niosh/docs/2004-135/

OSHA's safety and health assessment tool

To evaluate how an organization's occupational safety and health management system rates, OSHA has developed a useful e-tool focusing on 1) management leadership and employee involvement, 2) worksite analysis, 3) hazard prevention and control, and 4) safety and health training. The resulting scores provide information on areas for improvement. The tool is available at: (http://www.osha.gov/SLTC/etools/safetyhealth/asmnt_worksheet.html). While

providing a helpful evaluation tool for safety and health, it does not address worksite health promotion. It might be possible, however, to adapt to include the areas of human resources benefits as well as worksite health promotion.

The Health Enhancement Research Organization (HERO) Employee Health Management (EHM) Best Practice Scorecard

HERO provides a free on-line scorecard both to teach respondents about EHM best practices, and to evaluate opportunities to improve their organization's programs and evaluation efforts. Responses are benchmarked against a national database of other organizational respondents. It is available at: http://www.the-hero.org/scorecard_folder/scorecard.htm

Other program evaluation resources

Here is a listing of some program evaluation resources available for health promotion and occupational safety and health.

- CDC Framework for Program Evaluation in Public Health http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4811a1.htm
- Evaluation Context within the ILO International Guidelines on Occupational Safety and Health Management Systems http://www.ilo.org/public/libdoc/ilo/2001/101B09_287_engl.pdf

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