

**UNDERSTANDING WORKSITE WELLNESS INITIATIVES AND HOW  
COMPANIES CAN BETTER SUPPORT EMPLOYEE HEALTH**

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## STATEMENT OF PURPOSE

The information collected from this review of literature will be used to better understand workplace wellness programming and strategies that can be utilized to effectively provide wellness education and support healthy lifestyle behaviors. This information is critical in continuing wellness initiatives at companies, as techniques and avenues of support that meet employee's needs need to be determined to best support overall health and wellness.

As a registered dietitian in charge of employee wellness for a grocery retail chain, the purpose of this creative component was to complete a review of literature about effective worksite wellness initiatives and how they affect employee's overall health. This will help to determine techniques to best promote positive healthcare outcomes, specifically in non-traditional settings, such as Coborn's Inc. (St. Cloud, MN) grocery retail stores. This review of literature will discuss:

- a. Worksite Wellness Overview and Background
- b. Workplace Health Model
  - Assessment
  - Planning and Management
  - Implementation
    - In-person Programming
    - eHealth Initiatives
    - Nutrition and Physical Activity
  - Evaluation
    - Behavior Change

- Return on Investment

This review of literature included peer-reviewed articles gathered via the Iowa State University online library and through utilizing the PubMed and Google Scholar databases. Criteria used for identifying articles included key words such as ‘worksite wellness,’ ‘employee health,’ and ‘wellness initiatives.’ Various worksites such as hospitals, universities, and corporate offices were explored based on worksite wellness programs completed in the last 10 years.

## LITERATURE REVIEW

### Introduction

Physical inactivity, job stress, and ready access to calorically-dense foods are some of the factors that have contributed to a nationwide obesity epidemic (Chan & Woo, 2010). Most adults spend over one-third of their waking hours at their job; thus, the workplace provides an ideal space to implement wellness initiatives and programs that encourage employees to make positive lifestyle changes and help to reverse these trends (Rowan & Harishanker, 2014). Chronic health conditions related to poor nutrition and inactivity can negatively affect workplace productivity, mobility and morale, while increasing healthcare claims, sick days, and work-related injuries (Harvard School of Public Health, 2016). Of the nation's \$2.2 trillion in medical care costs in 2009, 75% accounted for people with chronic diseases (Centers for Disease Control and Prevention [CDC], 2014). For example, heart disease and stroke, both primary components of cardiovascular disease (CVD), are the first and fourth leading causes of death in the United States (CDC, 2014). This accounts for 17% of the nation's health expenditures and continues to grow as the population ages (CDC, 2014).

Chronic diseases are the most common and costly forms of health problems and can be prevented through implementing healthy lifestyle changes (CDC, 2014). Healthy People 2020 emphasizes the importance of worksite wellness as a means of promoting overall employee health (Office of Disease Prevention and Health Promotion [ODPHP], 2010a). Approaches found most effective in influencing employee health are evidence-based health promotion interventions and wellness programs (CDC, 2014). These studies suggest effective health promotion interventions that can be used separately or as a part

of wellness programs. Effective wellness initiatives include individual risk reduction supported with environmental changes to support health behavior change (CDC, 2014).

### **Worksite Wellness Overview and Background**

In response to the obesity epidemic and overall workforce health, many workplaces are adopting strategies to improve employee health. These strategies include programs targeted at improving employee health addressing topics such as physical activity, produce intake, stress management and smoking cessation (Case, 2010).

Building a culture of health in the workplace is essential in supporting employees' overall health and well-being. In 2004, only 6.9% of employers in the United States offered comprehensive health promotion programs, proving a need for legislation to encourage wellness promotion in the workplace (CDC, 2014; Department of Treasury et al, 2013).

Effective in 2013, The Affordable Care Act (ACA) recognized the need for disease prevention efforts and aimed to motivate employers to offer programming to meet those needs (Department of Treasury et al, 2013). The ACA has helped bring attention to disease prevention, while also investing in the workforce to build science-based programs, policies, and practices (Anderko et al, 2012). With the instillation of the ACA, legislation provides guidelines specific to participatory and health contingent worksite wellness programming (Department of Treasury et al, 2013). These two different types of programming determine how employees can be incentivized based on their involvement with worksite wellness programs (Department of Treasury et al, 2013).

Participatory programming is solely based on participation and requires employees to partake in wellness-related activities in order to receive incentivization

(Department of Treasury et al, 2013). Per the ACA, there is no limit to the financial value of these types of incentivization (Department of Treasury et al, 2013). Examples of these activities include attending a free health education seminar, participating in a diagnostic testing program or being reimbursed for part of the cost of a fitness center membership (Department of Treasury et al, 2013).

Health contingent programming requires employees to have satisfied a health-related standard in order to receive incentivization (Department of Treasury et al; 2013). For this type of programming, Section 2705 of the Patient Protection and ACA permits employers to vary insurance premiums by as much as 30% for general worksite wellness programming (e.g., nutrition or physical activity) and 50% for tobacco cessation programming (Democrats Senate, 2010; Department of Treasury et al, 2013). Examples of these health-related standards can be split into two categories: activity-only and outcome-based (Department of Treasury et al, 2013). Activity-only incentivization awards employees for performing health-related activities such as walking or eating more produce (Department of Treasury et al, 2013). Outcome-based incentivization awards employees for maintaining or attaining certain health outcomes such as smoking cessation, obtaining a healthy weight, or meeting blood pressure guidelines (Department of Treasury et al, 2013).

This legislation allows companies the option to provide incentivized deductibles, copayments, or coinsurance (Volpp, Asch, Galvin, Loewenstein, 2011). Effective health and prevention programs like those suggested of the ACA focus on multiple areas of wellness (e.g., nutrition education, physical activity, smoking cessation and mental well-

being) as well as incentivize employees to make sustainable health-related changes (Anderko et al, 2012; Case, 2010).

According to the Society for Human Resources Managers (SHRM), in 2015, 40% of organizations offered incentives for their employees who completed certain wellness-related activities, 25% provided health care premium discounts for employees who filled out their annual health risk assessment, and 20% offered discounts for participating in a wellness program (OSU, 2015). Many companies and organizations try to incentivize participation in these programs. A meta-analysis of 47 randomized controlled studies found that economic incentivization was preferred 73% of the time by employees (Kane, Johnson, Town, Butler, 2014). Financial incentives were found effective in producing short-term health-focused changes (e.g., completing a health risk assessment) and defined behavioral goals (e.g., going to the doctor to get immunizations) (Kane et al, 2014). Although these financial incentives were found effective in producing finite changes, there is still inconclusive data as to what type of incentive is best suited to promote sustainable changes such as weight control (Anderko et al, 2012).

A lottery incentive, such as a lottery system or a random drawing also illustrates that people are motivated by the chance to win; therefore, they are more likely to participate consistently throughout a program (Anderko et al, 2012). In a randomized control study by Volpp and others (2008), participants who were overweight were divided into three groups: Group 1: lottery program providing up to \$100 per day for weight loss; Group 2: “fee” charged based on how much total weight participants lost; and Group 3: no financial incentives provided to lose weight. These results suggested participants who received financial incentives lost significantly more total weight than

members who were not offered financial rewards over a 16-week period (Volpp et al, 2008). However, for the most impact, it is recommended to use incentives in combination with a prevention approach for sustainable long-term behavior change (Anderko et al, 2012). A prevention approach is one that offers access to incentives that employees may not have otherwise, such as access to healthful, affordable food (Anderko et al, 2012). By offering discounts or free access to healthier foods like fruits and vegetables, prevention incentives increase the likelihood that workers will purchase fruits and vegetables and repeat this for it to become a healthy behavior (Anderko et al, 2012).

### **Workplace Health Model**

The percentage of employers offering worksite wellness programs and benefits has substantially increased over the last 15 years (OSU, 2015). In order to reach employees across different states and locations, innovative approaches toward worksite wellness programming is necessary. Effective worksite wellness programs encompass a coordinated and comprehensive set of strategies intended to meet the health and safety needs of all employees (CDC, 2016). These interventions fall into four key categories: health-related programs, health-related policies, health benefits, and environmental supports described in Table 1 (CDC, n.d.b; CDC, 2016).

Table 1: Workplace Health Program Intervention Categories

Health-related programs	encourage opportunities for employees to begin, change, or maintain health behaviors
Health-related policies	provide formal or informal statements intended to promote health that affect a large population of employees

Health benefits	include various forms of compensation including health insurance coverage and/or employee discounts related to health and wellness
Environmental supports	apply physical factors that impact employee health

These strategies help target change at both individual (e.g., health behaviors, health risks for chronic disease, current health status) and organizational levels (e.g., health care costs, productivity, absenteeism, retention, culture, and employee morale) (CDC, 2016). Evidence suggests that programs that use coordinated, planned, and integrated approaches to improve employee health have further positive outcomes than traditional isolated interventions (CDC, 2016). In coordinating worksite wellness strategies, four main steps of the Workplace Health Model should be taken to ensure effective programming: assessment, planning and management, implementation, and evaluation (CDC, 2016).

### **Assessment**

For an organization to shift employees' perspectives to wellness, they must first assess the current workplace (CDC, 2014). This needs assessment is critical in identifying where to start and focus efforts (Chief Human Capital Officers Council [CHCOC], n.d.). Not only are needs assessments able to assess the workplace environment and available resources in a cost-effective way, they also can pinpoint employee needs and interests (CHCOC, n.d.). Needs assessments can be customized to each workplace, but it is suggested to gather data on employee health needs (although this may be already addressed by other sources such as a Health Risk Appraisal), demographics, dietary

intake, physical activity, financial knowledge, interest in health and wellness topics, and logistical preferences (e.g., time, frequency, and mode of delivery for education or activities) (CHCOC n.d., Julander, 2014).

One of the most common examples of wellness initiatives are biometric screenings and health assessments (OSU, 2015). The Ohio State University, Your Plan for Health (YP4H) wellness program, is well renowned for its innovation, outcomes, and employee participation (OSU, 2015). Faculty and staff can earn up to \$360 annually as a premium credit towards medical plans by completing their Personal Health and Well-Being Assessment (PHA) and biometric screening (OSU, 2015). These assessments and screenings are used to help identify common health conditions such as diabetes and heart disease as well as indicate employees that are increased risk for chronic disease and provide the education and help needed to treat their condition (OSU, 2015). Another company, a Midwest grocery retailer, HyVee, has also taken an interest in their employee's health. Annually, HyVee employees are strongly encouraged to attend their location's biometric screenings where a Registered Dietitian assesses height, weight, BMI, cholesterol and blood sugar levels and discusses a plan to help each employee make health goals (Hy-Vee, 2016). Through improvements in biomarkers, such as blood glucose via biometric screenings, HyVee has reported continuous improvements of employees' health as well as decreased healthcare costs company-wide (S. Roberts, personal communication, December 12, 2018). Not only do these screenings and assessments recognize chronic disease or risk for chronic disease, there is also evidence that participation results in health care cost savings and reduced emergency room visits (Maeng et al, 2018).

One tool that can be utilized to conduct an assessment is the Penn State's Worksite Evaluation and Assessment Statements (Appendix B) (CDC, 2014). These allow an organization to see whether they are offering holistic wellness opportunities for their employees (CDC, 2014). A more in-depth assessment of worksite wellness is The CDC Worksite Health Scorecard (Appendix C) (CDC, 2014). This scorecard allows employers to see if they are implementing evidence-based health promotion interventions like physical activity, nutrition, weight management, and stress management for their worksites (CDC, 2014).

Health screenings are also often used to identify health risks for individual employees on an annual basis through biochemical and anthropometric measures (Julander, 2014; OSU, n.d.). These screenings are often done at a physician's office or onsite by a medical professional, therefore, decreasing the burden of travel time for employees. The assessment covers key health measures such as height, weight, body mass index (BMI), blood pressure, total cholesterol, HDL cholesterol, and a blood glucose (fasting glucose or hemoglobin A1C) to assess risk of common health conditions such as diabetes and heart disease (Julander, 2014; OSU, n.d.). In a four-year study by Saleh et al (2010), employees who completed health risk screenings in addition to receiving year-round wellness awareness messaging saw favorable improvements in several areas including LDL and total cholesterol, aerobic exercise, blood pressure, stress, happiness, and sick days. Not only can this data help to guide a program, it can also be viewed as a wellness intervention as employers are bringing awareness to their employee's state of health (Saleh, et al, 2010; OSU, n.d.). In addition, employers offering discounts on medical premiums for achieving certain health markers can rely on a large

percentage of completion rates for health screenings (Dennis-Escoffler, 2016; Julander, 2014; OSU, n.d.).

Wellness program staff can facilitate programs and collect data through Health Risk Appraisals (HRA) and weekly online forms during these longer-term wellness programs to evaluate efficacy (Anderko et al, 2012; Julander, 2014; Kay, 2014; OSU, 2015). In programming with larger populations, such as an entire company, assessing data such as food/beverage consumption, water intake, physical activity, BMI and weight are easily self-reported (Anderko et al, 2012). However, weight status and BMI aren't ideal indicators for success due to being unable to distinguish between excess fat, muscle, or bone mass (CDC, n.d). Cholesterol levels, blood glucose, blood pressure are much better indicators of disease risk; however, access to these tests may be unattainable depending on resources available (Anderko et al, 2012)

It is important to note that in health screenings, Body Mass Index (BMI) is oftentimes the most common assessment tool used to help determine health status. However, this strategy does have limitations as a health indicator for employees. BMI is a measure of excess weight, rather than excess fat therefore it does not distinguish the difference between excess fat, muscle, bone mass or water weight (Ashwell, 2011; Ashwell, 2014; CDC, n.d.a; Cleveland Clinic, 2018). Furthermore, many factors influence BMI such as ethnicity, sex, and age (CDC, n.d.a; Cleveland Clinic, 2018). For example, older individuals usually have a higher body fat percentage compared to younger adults and women tend to have higher body fat percentages than men with both groups having an equivalent BMI (Ashwell, 2011; Ashwell, 2014; CDC, n.d.a; Cleveland Clinic, 2018). Muscle mass also increases weight, which therefore increases BMI. This

can be a conflicting in those that don't need to lose weight and are building muscle during a wellness initiative as BMI doesn't take into consideration lean body mass (Cleveland Clinic, 2018). Research suggests that other measurements such as bioelectrical impedance and underwater weighing are more accurate at predicting fat mass; however, these measures aren't readily available (Ashwell, 2011; Ashwell, 2014; CDC, n.d.a; Cleveland Clinic, 2018). Another measure that may be more accurate than BMI and more suitable for the workplace is waist to hip ratio (Ashwell, 2011; Ashwell, 2014; Cleveland Clinic, 2018). Waist to hip ratio has been found to be more accurate at predicting health risks such as diabetes, hypertension and strokes which is much more important to overall health than determining if someone is overweight or not (Ashwell, 2011; Ashwell, 2014; Cleveland Clinic, 2018).

### **Planning and Management**

Next, careful planning should be completed before any implementation of worksite policies, programs or environmental supports (CDC, 2016). During the planning process, leadership must be determined as on-site wellness committees can act as powerful tools in heading wellness initiatives by grouping together passionate employees with an interest in health and wellness. These committees can act as advocates for policy, systems, and environmental changes (Case, 2010; CDC, 2016). In establishing an on-site committee, employees from all levels of staff should be considered for a role; more importantly, committee members should be chosen strategically to best meet the goals of the group (Table 2) (Case, 2010; Cigna, 2015; Burke & Richardsen, 2014; Harvard, 2016).

Table 2: Successful Wellness Committee Employee Attributes

The Planner	a person, often the committee leader, who keeps the group on task
The End-User	a person who represents all employees within the company. They want to be healthier; they just don't know how to achieve it
The Gate-Keeper	a person who understands the company's schedule and can make sure projects are within the company's best interests
The Salesperson	a person that has good rapport with employees and can spread the program's ideas and initiatives
The Clinician	a person on the committee, like a registered dietitian, who has a health and wellness background who can help suggest initiatives that are science-based

Although company committees can help motivate and encourage employees' participation, there must be internal wellness champions (Case, 2010; CDC, 2016). When employees feel alone in their wellness journeys, especially during wellness initiatives, they are often more likely to not meet their goals. For example, Case (2010) found that participants who didn't feel alone in their efforts were more motivated to make healthier choices when other employees championed wellness activities. Utilizing a team approach where employees provide peer support, helps to create social influence and support positive behavior change (Case, 2010). Wellness champions are important in affirming wellness initiatives by participating in wellness activities and encouraging coworkers to do the same (Case, 2010). These individuals should be identified before, during and after a wellness program based on interest and involvement to help secure influence of the initiative (Case, 2010).

In addition to providing peer support to employees, it is also important to utilize research-based programming strategies. This can help ensure the efficacy of programming in helping employees making wellness-related changes. Healthy People 2020 suggests interventions impacting individual's knowledge about nutrition in the

workplace are effective and a healthcare professional, such as registered dietitian, is suggested to be on staff to help educate (Blankenship, 2013; ODPHP, 2010b). Human resources personnel also provide a great deal of support to wellness initiatives. These individuals help communicate information on health insurance benefits including wellness screenings and medical plan premiums discounts (Loyola University, n.d.). Members of the company's operations team also have a large impact on overall program success. Without the support of upper management, programs often lose momentum as initiatives aren't seen as important to the company as whole.

## **Implementation**

With the increase in employers offering worksite wellness programs, there is a variety of worksite settings, including those in which employees may be at several locations like grocery retail, Extension offices, and universities instead of one main campus or corporate office. While these employers can reach more employees, both part-time and full-time, they may face many barriers in doing so. Due to the organization of nontraditional worksites, face-to-face programming is often difficult or impossible due to time and location limitations (Linnan, 2008). Because of this, oftentimes, interventions are targeted for on-campus employees only, while off-campus employees are neglected (Bradley, 1996). For example, Safeway, a large grocery chain based out of California, provides employees near their Pleasanton corporate office free access to their health and fitness center (Rowan & Harishanker, 2014). While this is a smart strategy in increasing wellness opportunities for employees, these benefits are limited to employees in the area (Rowan & Harishanker, 2014). Because Safeway has nearly 900 locations throughout 18

states, opportunities are limited to the majority of employees who work at these satellite locations (Rowan & Harishanker, 2014).

Research has shown a variety of methods that can be implemented to support the variety of settings employees work in. These include awareness generation (e.g., health screenings), in-person programs (e.g., group-based, one-on-one counseling), eHealth initiatives (e.g. email notifications, text message reminders, online programming) and environmental factors (e.g., standing desks, healthier vending) (Center for Connected Health Policy, n.d.; OSU, 2015; Montgomery et al, 1992; Park et al, 2010).

The benefit to utilizing a variety of wellness strategies increases the likelihood of reaching a larger number of employees, especially those at satellite sites, may help to reduce the likelihood of employees developing four out of the ten most expensive health conditions for employers (e.g., chest pain, high blood pressure, diabetes and heart attack) (Society for Human Resources Managers [SHRM], 2018).

### *In-person Programming*

Once a company has assessed their organization and recognized areas for improvement in promoting wellness, they are able to implement programs that meet the needs of their employees. Just as there are various settings and approaches to promoting corporate wellness, there are variations in what is recommended for program duration. Overall program length is affected by the amount of curriculum content and frequency information is provided. Successful wellness interventions have been shown to have a duration between six to twelve weeks (Table 3) (Case, 2010; Anderko et al, 2012; The Ohio State University, 2015; Georgetown University, 2014; Kay, n.d.).

Literature suggests that effective short-term programming should be six-weeks in duration (Case, 2010; Georgetown University, 2014). Effective employee wellness programs, include interventions that focused on tracking of physical activity (e.g., steps, minutes), fruit/vegetable intake, and water consumption on an online portal or paper form (Case, 2010; Georgetown University, 2014). Not only did tracking trigger motivation and enhance peer support, it was also shown to be effective in increasing physical activity minutes, improving readiness for exercise, fruit/vegetable consumption, and water intake, while decreasing overall weight and waist circumference as seen in Table 3 (Case, 2010; Georgetown University, 2014). In evaluating program effectiveness of a six-week program, data such as demographic information, self-reported health habits (e.g., physical activity levels, fruit/vegetable consumption, water intake) and body measurements (e.g., weight, waist circumference) should be obtained via self-reporting surveys or health screenings (Case, 2010; Georgetown University, 2014). An example of data collected by Georgetown University's Wellness Explorer program can be reviewed in Appendix A (Georgetown University, 2014).

Long-term worksite wellness programming has been deemed successful in 12-week periods or on a quarterly basis (Table 3) (Anderko et al, 2012; Kay, 2014; Ohio State University [OSU], 2015; Julander, 2014). Effective long-term interventions have focused on providing wellness education (e.g., nutrition education, physical activity benefits) in addition to opportunities for wellness (e.g., physical activity, fruit/vegetable intake water consumption, and/or mental well-being) (Gazmaraian et al, 2013; Malik, 2013). These interventions are positively correlated to improvements in weight status, body mass index (BMI), cholesterol levels, blood glucose, blood pressure, food/beverage

consumption and physical activity levels among participants (Anderko et al, 2012; Kay, 2014; Ohio State University [OSU], 2015; Julander, 2014).

While the aforementioned programming suggests several positive outcomes, there are limitations to these types of programming effectiveness. Self-report data may not be fully accurate due to human error and because often employees participating in wellness challenges may be more motivated to make wellness changes and not necessarily those who are at high risk for developing chronic diseases (Case, 2010; Julandar, 2014).

Table 3: Wellness Programming Attributes

<b>Program</b>	<b>Type of Program</b>	<b>Length of Program</b>	<b>Target Audience Characteristics</b>	<b>Highlights</b>
Oregon State University Extension (Case, 2010)	Wellness Challenge	6 weeks (unknown contact hours)	<ul style="list-style-type: none"> <li>• Corporate employees</li> <li>• Self-volunteered</li> <li>• Looking to increase nutrition and physical activity wellness</li> </ul>	<ul style="list-style-type: none"> <li>• Tracked physical activity and fruit/vegetable intake</li> <li>• Point system</li> <li>• Team competition, peer support, personal goal setting</li> <li>• Significant positive change</li> <li>• Small sample size (n=77)</li> </ul>
Georgetown University—Wellness Explorers Challenge (Anderko et al, 2012; Georgetown University)	Wellness Challenge	6 weeks (unknown contact hours)	<ul style="list-style-type: none"> <li>• Campus faculty/staff</li> <li>• Self-volunteered</li> <li>• On-campus</li> <li>• Looking to increase nutrition and physical activity wellness</li> </ul>	<ul style="list-style-type: none"> <li>• Tracked water intake, fruit and vegetable consumption, workouts</li> <li>• Point system</li> <li>• Online portal</li> <li>• Peer support</li> <li>• Sample size unknown</li> </ul>
Walking Canes—University of Miami (Anderko et al, 2012; Kay, 2014)	Wellness Challenge	12 weeks (0 direct contact hours, unknown indirect contact hours)	<ul style="list-style-type: none"> <li>• Campus faculty/staff</li> <li>• Self-volunteered</li> <li>• On-campus</li> <li>• Looking to increase physical activity</li> </ul>	<ul style="list-style-type: none"> <li>• Tracked daily steps using pedometers</li> <li>• Peer competition</li> <li>• Small sample size (n=300)</li> <li>• Financial incentive</li> </ul>
Your Plan for Health (YP4H)—Ohio State University (OSU, 2015)	Wellness Challenge/Wellness Education	Ongoing, Quarterly (12 weeks, unknown contact hours)	<ul style="list-style-type: none"> <li>• All campus faculty/staff</li> <li>• Self-volunteered</li> <li>• Looking to increase overall wellness</li> </ul>	<ul style="list-style-type: none"> <li>• Point system</li> <li>• Employees can earn point towards medical premiums</li> <li>• Must complete Personal Health and Well-being Assessment (PHA) and Biometric Screening</li> <li>• Sample size unknown</li> </ul>

Iowa State University Extension Program (Julander, 2014)	Wellness Challenge/Wellness Education	24-28 weeks (with 13-26 sessions x 1-1.5 hours of direct contact)	<ul style="list-style-type: none"> <li>• Local Iowa-based company employees</li> <li>• Randomly selected</li> </ul>	<ul style="list-style-type: none"> <li>• Bi-weekly lunch-and-learns</li> <li>• Variety of wellness modules</li> <li>• Various wellness challenges</li> <li>• Newsletters</li> <li>• Small sample size (n=176)</li> </ul>
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### *eHealth Initiatives*

As more companies invest in wellness programs, they are relying on efficient and inexpensive eHealth initiatives such as telephone, email, text messages, apps, online resources and video to reach employees that may be out of state or even out of the country (Hutchesson et al, 2015b; Julandar, 2014). The use of eHealth initiatives may be a beneficial strategy to overcome participation barriers related to satellite employee locations and budgetary constraints (MacNab & Franics, 2015). Studies suggest that with the increase in eHealth initiatives, face-to-face contact, that was once necessary for positive outcomes, is no longer needed (Kriesel, Crawley, and Bowie (2013).

eHealth initiatives such as online education can be made available to all employees regardless of location and are often utilized to provide activities employees can perform related to wellness, information on general health practices, and health screening assessments to monitor progress (Wahlqvist, 2007). Online resources that provide educational modules can be effective in improving lifestyle behaviors (e.g., increasing produce consumption) and decreasing chronic disease risk (e.g., cardiovascular disease) (Lucini et al., 2011). Online wellness education should provide targeted, audience-specific education messaging and include resources that coincide with educational messaging (MacNab & Franics, 2015). Studies have examined the impact web-based education (e.g., online portals) has versus in-person education (Bensley et al., 2011; Neuenschwander, 2013). Targeted behavior education has resulted in significant improvement in both web-based and in-person groups in some studies and even more improvement in web-based education in others (Bensley et al., 2011; Neuenschwander, 2013). For example, Women, Infants and Children (WIC) clinics found that web-based

produce consumption education improved consumption in WIC participants, more than in-person education (Bensley et al., 2011). In other studies, focusing on nutrition and food safety programs, online education was shown effective in improving dietary intakes, increasing awareness of nutrition recommendations, self-reported knowledge, and enhancing self-efficacy (Campbell, Koszewski, & Behrends, 2013; Francis, Martin, & Taylor, 2012; Francis, 2014). In addition, these eHealth interventions can be effective in promoting weight loss (Hutchesson et al, 2015b). While these strategies are effective, there are barriers to online education that can result in low participation (Block et al., 2008; Jeffery, 2012; Linnan, 2008). Studies suggest lack of interest, lack of employee resources (time/labor/access) to complete wellness-related activities, poor funding and poor management support affect online wellness education outcomes (Block et al., 2008; Jeffery, 2012; Linnan, 2008). This suggests that utilizing relevant information such as compelling tools (e.g. recipes using foods on hand, exercises to do at your desk); timely resources (e.g., foods on sale, time-of-year outdoor activities), interactivity (e.g., blogs, quizzes, sharing pictures), and/or incentives (e.g., recipes, prizes, coupons) can attract employees and improve participation (Case, Cluskey, and Hino, 2011).

In addition to online portal systems, telehealth, defined as encompassing a variety of technologies and tactics to deliver health education and services, can expand education messaging outside of a campus or corporate office (Center for Connected Health Policy, n.d). Telehealth often uses telephone, text messages, apps, or video to reach distance workers or satellite locations (Center for Connected Health Policy, n.d). This allows efficient use of time to influence wellness at work (Tang-Taye et al., 2009). Ready access to the internet via free WiFi access in many work and public spaces, along with

affordable mobile devices has resulted in increased access to the internet, therefore making online education, more widely accessible (Pew Research Center, 2018). Research suggests that Americans spend more time per day on their phones than they do on their computers (Choney, 2011). Even more so, they are spending more time on apps, with an average of 81 minutes per day compared to 74 minutes on desktop/mobile web (Choney, 2011). Whereas barriers that once were digital illiteracy and access to the internet do not pose problems any longer, research shows that education via telehealth communication is well-received by participants (Tang-Taye et al., 2009; Stotz et al., 2019).

In addition to supporting behavior change, eHealth initiatives also serve as communication tools. There is promising evidence that suggests eHealth initiatives help improve communication between employers and their employees when it comes to health and wellness (e.g., reminding employees about upcoming health screenings or wellness activities) (Hutchesson et al, 2015b). This can be critical in improving employee morale, motivation, and accountability. Accountability programs such as email or text reminders and app notifications can further improve self-motivation and monitoring. The statewide online wellness initiative, Live Healthy Iowa (formally Lighten Up Iowa), utilizes weekly email messaging year-round to communicate nutrition and physical activity related wellness messaging, reaching over 230,000 Iowans (Litchfield, Muldoon, Welk, Hallihan, & Lane, 2005). Additionally, a University of Tennessee Extension study saw higher participation rates over other organizations at 33%, when utilizing emails, texts, phone calls, and social media to increase communication with participants (Donaldson et al, 2016).

Accuracy and adherence to self-monitoring of health goals also greatly affect the success of wellness interventions (Hutchesson et al., 2015b). In a meta-analysis of 84 studies focused on eHealth interventions for the prevention and treatment of overweight and obesity and adults, there was no significant difference between the success of written goals, computer reporting, or smartphone recording (Hutchesson et al, 2015a). However, 89% of people preferred computer or smartphone recordings over paper (Hutchesson et al, 2015a). This preference for tracking using technology suggested that eHealth can be a positive strategy in promoting company wellness initiatives and education.

### *Nutrition and Physical Activity*

According to the Social-Ecological Model for Food and Physical Activity Decisions, environmental changes at worksites can play an integral role in improving wellness behaviors (e.g., food/beverage intake and physical activity) (American College Health Association [ACHA], 2012; ODPHP, 2014). Settings such as worksites, largely influence individual choices as they determine what foods and physical activity opportunities are available/offered onsite, therefore impacting social norms and values (ACHA, 2012; ODPHP, 2014). By targeting several aspects of the work environment, new initiatives can be implemented to improve employee health (The University of Iowa College of Public Health, n.d.). These changes may focus on physical activity (e.g., work station redesign such as standing or treadmill desks; onsite fitness centers) (MacEwan et al, 2014; SHRM, 2013, The University of Iowa College of Public Health, n.d.) and/or nutrition (healthy vending options and cafeterias) (Rowan & Harishanker, 2014).

Working patterns have changed and have shifted employees to work more desk jobs. This sedentary behavior has resulted in increased physical inactivity, which is a risk factor for obesity, diabetes, and heart disease (The University of Newcastle, n.d.; CDC, 2014). Incorporating subtle ways for employees to increase their daily physical activity can help reduce occurrences of these chronic diseases (The University of Newcastle, n.d.). Examples of environmental factors include standing/treadmill desks and onsite walking paths that provide more opportunities for activity without forcing employees to exercise (Grunseit et al., 2013). Standing is proven to burn more calories than sitting and studies suggest that standing desks offer a highly accepted form to reduce sitting time at work (Gilson et al., 2011; Grunseit et al, 2013; Reiff et al., 2012). Along with reducing sitting time and decreasing overall sedentary behavior, standing and treadmill desks have also been shown to not impact work performance (MacEwan et al, 2014). With adjustable heights, these desks provide the right ergonomics for all employees and don't require any specific clothing, although, tennis shoes are suggested (SHRM, 2013). In addition, treadmill desks showed the greatest health benefits through improvements in postprandial glucose, high-density lipoprotein [HDL] cholesterol and anthropometrics (MacEwan et al, 2014). Although there are several positives to these active workstations, there are also negatives to consider (SHRM, 2013). Concern for distraction while walking on a treadmill is valid. However, most treadmill desks only reach two miles per hour, and the automatic-shutdown key is suggested to be clipped to the user while in use (SHRM, 2013). The SHRM (2013) suggests precautionary measures like having all users sign waivers and provide proper training for everyday use. Another barrier to providing standing and treadmill desks for employees is cost (Human Solution, n.d.). With walking

desks ranging from \$1,000-\$5,000+, this is a large expense for employers (Human Solution). Standing desks offer a more affordable option at around \$400+ (Human Solution, n.d.).

Organizations such as Mayo Clinic in Rochester, Minnesota, are improving employee health by incorporating health assessments and physical activity (Borah et al., 2015). As Mayo Clinic is a healthcare provider itself, most employees and their dependents receive their medical care through the clinic, making it an excellent setting to assess if an onsite wellness center affects weight loss and decreases overall healthcare costs (Borah et al, 2015). To assess data, Borah and colleagues (2015), used adults over the age of 18 years old who were enrolled in the campus's wellness center from January 2007 through December 2010 to constitute the study sample of 3,199 employees. The wellness center provided programs such as personalized health coaching, small group training, wellness evaluations, massage therapy, stress management, and group fitness. In addition, they hosted regular classes such as cooking healthy meals and provided healthier menu options in its cafeteria (Borah et al, 2015). Baseline data was collected the first year (2007) from employee health records (EHRs) and during the 3-year follow-up. Wellness engagement was determined by categorizing employees into 4 categories based on center visits: 1 to 60, 61 to 180, 181 to 360, and 360 or more. Data for the study was evaluated from three sources: EHRs, health care claims database, and the wellness center database (Borah et al, 2015). The study found the more an employee visited the wellness center, not only were they more likely to decrease their body mass index (BMI), they also decreased patient- and health plan-paid annual costs for medical and pharmacy services as shown in Table 4 below (Borah et al, 2015). Although there were positive results from

the Mayo Clinic study, it was completed with employees already involved with the wellness center on the Mayo Clinic campus. This means there wasn't abundant research suggesting strategies to positively influence readiness to change in employees or how to spark interest in making healthy lifestyle changes.

Table 4: Mayo Clinic Employee Wellness Visit and Costs Outcomes

	<b>1 to 60 visits</b>	<b>61 to 180 visits</b>	<b>181 to 360 visits</b>	<b>&gt; 360 visits</b>
<b>Employees</b>	688	896	810	832
<b>Total Annual Costs</b>	\$13,267	\$9,538	\$9,332	\$8,293

Other wellness programs also focus attention on physical activity. Both Georgetown University and the University of Miami illustrate an obligation to physical activity promotion on their campuses with their walking programs (Anderko et al, 2012). As a part of their established wellness frameworks, these universities offer a variety of programs such as smoking cessation, weight reduction, yoga, and stress management (Anderko et al, 2012; The University of Miami, 2018). Georgetown faculty and staff as well as community members are challenged to participate in the 'Weekly Walk to the Mall,' a 4-mile hike to the National Mall (Anderko et al, 2012). The University of Miami hosts a similar program, an annual 12-week walking competition for faculty and staff (Anderko et al, 2012). Around 300 participants from 3 University of Miami campuses compete yearly for round-trip airline tickets by exceeding 10,000 steps per day (Anderko et al, 2012). Although participation was quite small at only 2% of the 15,000 full and

part-time employees at the University of Miami campuses and outcomes weren't published, these walking programs and initiatives encouraged more movement throughout the day for participants, which has shown to decrease risk of chronic disease (The University of Miami, 2018). To help motivate participants to improve their physical activity through behavior modification, employers can provide free pedometers for employees to track daily steps and set goals (e.g., 10,000 steps) (Anderko et al, 2012; Kay, 2014)

The large grocery chain Safeway, who employs over 265,000 employees, is making environmental changes to affect the health of their employees (Safeway, n.d.). Their leadership team connects wellness to all company strategies such as providing free memberships to a state-of-the-art preventative-care health and fitness center built just for employees near Pleasanton, CA (Rowan & Harishanker, 2014). Eighty percent of employees in the Pleasanton area take advantage of this health and fitness center, along with their health-focused cafeterias (Rowan & Harishanker, 2014). While onsite exercise facilities, like those in the Mayo Clinic study and Safeway, show potential in encouraging positive outcomes such as increased physical activity, other studies suggest barriers (Schweschenau et al, 2008). Worksite fitness facilities have been often found to have low utilization rates due to internal barriers like feeling embarrassed to exercise around coworkers or external barriers like inadequate exercise/locker room facilities (Schweschenau et al, 2008). This suggests that smaller changes, such as implementing standing or treadmill desks or walking programs, may have greater success in improving physical activity as they are more widely accepted compared with onsite fitness facilities (Gilson et al, 2011; Grunseit et al, 2013; Reiff et al, 2012).

Implementing policies and programs that promote environmental change can mitigate negative workplace habits and promote a “culture of health” (Harvard School of Public Health, 2016). Policies are company-wide guidelines for all employees and can have positive impact on overall health (Julander, 2014). Pertinent policy ideas include nutrition standards for worksite cafeterias and vending, onsite blood pressure monitoring areas, paid leave for employee exercise, fresh fruit/vegetable breakroom availability, paid release time for employees to get their biometric screening (or offering onsite screenings) (Julander, 2014; Utah Department of Health, 2013).

One type of policy that has been implemented in many workplaces is changing the food offerings of vending machines. Most companies have existing vending machines or food for purchase but often these choices aren't nutritious options (Penn State, n.d.). These vending machines are recognized as an obesogenic factor, or an item that impacts obesity, and has increased the availability of nutrient poor, energy dense foods to employees (Penn State, n.d.). It can be difficult to find nutritious options in vending machines in all areas; however, employers have an opportunity to impact the type of food their employees purchase from vending machines by switching out unhealthful options for healthy ones. Several studies have suggested the positive impact environmental interventions like this can have on dietary choices (Rosi et al, 2017; Bos, 2018). Rosi et al (2017) replaced various vending machine items at the University of Parma in Northern Italy with more nutrient-rich foods without acknowledging what options were more nutritious. This resulted in higher sales of more nutritious products and decreased sales of nutrient-poor choices (Rosi, 2017). Similarly, Bos et al, (2018) found that increasing access to more nutritious foods and decreasing access to nutrient-poor foods in vending

machines, resulted in greater overall purchasing of nutritious foods and decreased nutrient-poor food purchases by 39% (Bos et al, 2018). In addition, Story et al (2008), found that reducing the price of nutritious food options and including point-of-purchase labeling in vending machines and worksite cafeterias resulted in small but significant increases in fruit and vegetable consumption.

Changing company policies to impact environmental health, like those of vending machine guidelines, to provide healthier food options can make a substantial impact on overall employee dietary habits and can help decrease consumption of sugar sweetened beverages and high sugar, high sodium foods (Harvard School of Public Health, 2016). Companies can work with current and new vendors to provide more nutritious options at the worksite (Penn State, n.d.). Rapport with employees can be built by updating them on new initiatives, offering taste testing of new products and utilizing signage to acknowledge healthier products (Penn State, n.d.). Other policies can include direction on foods provided at business meetings (Harvard School of Public Health, 2016). For worksites looking to provide opportunities for wellness meetings, there are ample resources available such as healthy meeting guides and toolkits such as that from The National Alliance for Nutrition and Activity (NANA), which provide guidance for creating a culture of health and wellness during meetings (Center for Science in the Public Interest [CSPI] n.d.; University of Minnesota, 2013). Recommendations concerning nutrition at meetings include offering fruits/vegetables, whole grains, and little to no-sugar-added beverages, avoiding large portion sizes and placing food/beverage in prominent positions where they are likely to be seen by all attendees (CSPI, n.d.; State of Colorado, n.d.).

Other initiatives include making one-on-one nutrition counseling with a Registered Dietitian available for employees either on a weekly or monthly basis (The University of Iowa College of Public Health, n.d.). This availability in the workplace not only makes nutrition counseling more accessible, it also shows positive outcomes such as improvement of weight status, cholesterol levels and fasting blood glucose (Montgomery et al, 1992; Park et al, 2010).

These physical activity and nutrition strategies have the ability to reduce health risks and improve quality of life for over 138 million workers in the United States (CDC, 2015; Nobrega, n.d.). They can also be seen as a way of supporting positive behavior modification by directly addressing factors that cause energy imbalance (CDC, 2015; Nobrega, n.d.). The ultimate goal of an organization is to create an environment that is more conducive to wellness (Nobrega, n.d.). Forming and executing policies to promote anti-obesogenic environment changes requires support from key players in the company such as senior management (Nobrega, n.d.). When these policies are put in place, they are shown to influence social norms, increase healthy behaviors and improve wellness knowledge of employees (CDC, 2015; Nobrega, n.d.).

## **Evaluation**

Program evaluation may include a variety of approaches including assessing behavior changes, biochemical markers, participant feedback and return on investment. Evaluating these assessments and the impact of worksite wellness programs is essential to the progression of employee wellness programming and success.

### *Behavior Change*

To assess whether employees are making change, readiness to change and confidence levels can be rated before, during and after programs (Case, 2010). Determining this self-efficacy is important; in a 2011 Stress in America Survey, 27% of respondents stated that lack of willpower was their largest barrier to making healthy lifestyle changes (Morin, 2014). Martin (2011) reported wellness program participants rated their self-esteem using the Rosenberg Self-Esteem Scale before and after the program with results showing increased self-esteem levels post program (University of Maryland, 2019). In improving employee self-efficacy and confidence through wellness programing, employers can help guide employees towards incorporating healthier lifestyle behaviors (Morin, 2014; Martin, 2011).

It is also important to seek employee feedback after wellness initiatives to determine employee perceptions and modify programs to make more appealing and improve participation (National Center for Chronic Disease Prevention and Health Promotion, n.d.). This can be achieved by utilizing surveys, individual interviews and/or focus groups (Squiers, 2015). Asking direct open and close-ended questions that are easily understood by employees can be useful in determining individual's program perceptions (Table 5) (Squiers, 2015).

Low response rates can make evaluating program efficacy difficult. In order to increase survey response rates, the Department of Health and Human Services (2010) recommends contacting participants four times through various notifications (e.g., email, phone/text, mail) and creating participant-friendly forms that limit the number of questions to only relevant information.

Table 5: Useful Questions in Determining Wellness Program Effectiveness

What's working best in our program?
What progress have you seen due to the program?
What do you hear wellness participants say about our program?
What would you do differently if you were on the wellness leadership team?
What isn't working in our program?
What wellness services do you think we offer?
What wellness services would you like us to offer?
How do you feel about participating (or not) in our program?
Do you believe our program can help you?

*Return on Investment*

The financial benefits to worksite wellness programs are critical if a company will remain invested in supporting it. Worksite wellness programs have resulted in 25% lower costs in sick leave, health plans, workers' compensation, and disability insurance than those without (Baicker, Cutler and Song, 2010; Baxter, 2013; Chapman, 2012). Healthier employees are often happier, work harder, and are more efficient (Dokolasa, 2018; Rowan & Harishanker, 2014; Young Entrepreneur Council, 2013).

A meta-analysis of 56 financial impact studies revealed that absenteeism (e.g., missed work due to illness, burnout, depression) and medical expenditures were 25-30% lower for employees participating in wellness initiatives than those who weren't (CDC, 2014; Forbes, 2013). This research reviews the financial impact that absenteeism has on a company; however, it doesn't attribute presenteeism, which could be a more serious

contributor (Harvard Business Review, 2004). Presenteeism is defined as a worker going to work, but because of illness or other medical conditions, not fully functioning (Harvard Business Review, 2004). This significantly affects job duties and can impact productivity by one-third or more (Harvard Business Review, 2004). However, investing in wellness programming can greatly affect worksite financial savings. Per *Corporate Wellness Magazine*, for every \$1 that is invested, the company roughly produces \$4 in savings through decreased health costs, increased productivity, and fewer sick days (Young Entrepreneur Council, 2013; Dokolasa, 2018). Similarly, Baicker, Cutler, and Song (2017) found that return on investment of absenteeism was \$2.73 for every dollar spent and \$3.27 for every dollar spent on medical costs. Likewise, Baxter et al (2014), showed that offering worksite wellness program resulted in an average 138% return on investment.

With beneficial outcomes of worksite wellness programming, it is suggested that a wider adoption of health and wellness centered programs could improve not only health outcomes for employees and increase their productivity, but also could produce financial savings for companies (Baicker, Cutler and Song, 2010). Although these cost savings findings are encouraging, it can take 2 to 5 years to produce positive return on investments (Baicker, Cutler, and Song, 2017). It is important to stay persistent and make appropriate adjustments to wellness programs as necessary to keep initiatives engaging and effective for employees.

## **Limitations**

With wellness being a sought-after initiative for many companies, there is a problem with identifying what wellness truly means. The concept of wellness is poorly defined and has different meanings to different individuals. While one person may think of wellness in terms nutrition and fitness, another may think of it as stress management. For this reason, what works for one company may not work for another. The worksite culture greatly affects the structure and the outcome of the wellness program and is dependent upon a variety of variables. More research needs to be conducted in a greater variety of settings to help determine more researched-based guidelines for worksite wellness initiatives.

Another limitation in researching worksite wellness programs was the lack of information on communicating wellness programs successfully. While many of the studies and programs suggested effective wellness strategies for a company, most were set in a traditional corporate setting or within a campus of a hospital, university or manufacturing plant. Through these settings, marketing can easily be completed through email blasts and breakroom and on campus posters. For other nontraditional settings, like retail, where there are many locations and many part-time employees, there was little research to suggest effective communication techniques in these settings. Because many companies have part-time employees who often don't have access to employee email addresses and often don't work regular schedules, they rely on managers to provide these employees with company information. This is an unreliable source of consistent information, especially with a wellness program as not all employees may see the value

of such a program. More research needs to be conducted to determine effective approaches for communicating wellness.

### **Discussion, Conclusion and Checklist for Program Revision**

The importance of worksite wellness as a means of promoting overall employee health is widely acknowledged, and even emphasized in Healthy People 2020 (Office of Disease Prevention and Health Promotion). Effective worksite wellness programs use multi-component interventions to affect positive health changes in employees. When evaluating the research on employee health initiatives, there were several main components across effective studies. The data from these studies support effective program settings, program length, importance of environmental change, key players, evaluating outcomes, and return on investment.

Currently, Coborn's Inc. hosts an annual 8-week wellness challenge at its corporate and grocery retail locations where employees are encouraged to improve various areas of wellness including physical activity, healthy eating, and stress management. In addition, there have been recent changes to improve environmental factors at their corporate office such as healthier vending, onsite fitness facility, and a walking path, resulting in increased access to nutrient-rich foods and physical activity. Although these recent changes have been well-received, more changes can be made to best support employees health and wellness. In order to integrate more wellness strategies into the culture of Coborn's Inc, a needs assessment, like the CDC Worksite Health Score Card must first be completed. It will also be important to work with human resources and the wellness committee to better evaluate outcomes and return on investment. Table 6

provides suggestions for program revision based on the research from this literature review.

Table 6: Proposed Coborn’s Worksite Program Revision Checklist

<b>Program Component</b>	<b>Current Program Practices</b>	<b>Needs to be Added or Modified</b>	<b>Suggested Revision</b>
Program Setting	Corporate/Retail grocery setting	N/a	<ul style="list-style-type: none"> <li>• This program will continue to be offered to employees working in the retail setting.</li> <li>• A multi-component approach will be used throughout the calendar year.</li> </ul>
Program Length	Annual 8-week wellness challenge	✓	<ul style="list-style-type: none"> <li>• Program will be adjusted to provide 6-week wellness challenges and quarterly (12-week) initiatives and themes.</li> <li>• Ideally these challenges will be completed 2 times per year, one in the fall and one in the spring.</li> </ul>
Promoting Environmental Change	Walking paths, exercise facility, healthier breakroom food and beverages	✓	<ul style="list-style-type: none"> <li>• Currently, there is increased access to healthier food and beverage, walking paths, and an exercise facility at the corporate office.</li> <li>• Revise environmental change initiatives, particularly vending and breakroom food and beverage options, to be implemented at satellite locations.</li> <li>• The goal is to implement these changes in each district, adding one district per year.</li> </ul>
Key Players (e.g. operations committee, managers, wellness committee, human resources)	Partnering with wellness committee, HR	✓	<ul style="list-style-type: none"> <li>• Continue to collaborate with the operations committee and wellness committee to reinforce successful initiatives.</li> <li>• Continue to partner with human resources to provide incentives such as \$25 off monthly medical plan reimbursement.</li> </ul>
Outcome Evaluation	Pre- and post-challenge surveys	✓	<ul style="list-style-type: none"> <li>• Continue to create pre- and post-challenges surveys (including weight, challenge involvement, and perceptions on challenges).</li> <li>• Add more pertinent details such as fruit and vegetable consumption, physical activity, and stress levels.</li> <li>• Work with human resources to obtain and evaluate completed health screening data.</li> </ul>

			<ul style="list-style-type: none"> <li>• Identify validated tools to use such as those from the National Institute of Health (NIH) Short Dietary Assessment Instrument files (NIH, 2018).</li> <li>• Utilize the CDC Worksite Health Score Card to determine baseline for future programming and base initiatives off results. Obtain data through an electronic form of this scorecard to employees via email.</li> </ul>
ROI	N/a	✓	<ul style="list-style-type: none"> <li>• Plan to work with human resources to track shifts in health care costs and determine changes in sick leave, absenteeism and productivity.</li> </ul>

When developing and implementing a wellness program, it is important to note that initiatives will never *make* someone change how they live their life; however, wellness programs can influence people's behaviors and “educate and entice” employees to make changes (Bur & Richardsen, 2014). Successful programs need to affect not only an employee at work, but also impact them enough to bring those behavior changes home with them.

As the research reinforces, to be successful, worksite wellness programs must be holistic, tailored to the employees, creatively marketed and incentivized, and most importantly supported by top management (Anderko et al, 2012). Worksite wellness interventions not only can support programs and policies to make it easier for employees to be healthier, but also can affect long-term health benefits. Successful organizations are those that shift employee’s perspectives from believing that practicing healthy habits is a once-a-year doctor’s office visit to one that health is practiced with small daily healthful habits (Rowan & Harishanker, 2014). Through these changes, employers are creating a healthy workforce which in turn decreases absenteeism, reduces overall healthcare costs, and improves productivity. Although the many benefits of worksite wellness programs and initiatives have been studied and are known, in order to determine effective strategies for various worksite settings, further exploration of wellness programing is needed.

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## APPENDIX A

### Georgetown University's Wellness Explorer Challenge Tracking

## Wellness Explorers Weekly Participation

### Weekly Participation

Have you completed the Health Advocate Personal Health Profile?

Complete Here: <https://members.healthadvocate.com/>

- Yes  
 No

What (if any) GUWellness programs did you participate in this week?

Check all that apply

- Kick-Off Event (5/28)  
 Walk With Charles (Every Thursday)  
 Mountain Athletic Training (Tuesdays & Thursdays)  
 Free Yoga at Yates (Every Friday)  
 CPR/AED Training (6/6)  
 Creative Spark (6/9)  
 Caring for Aging Parents (6/10)  
 Jan Hice Lunch & Learn (6/17)  
 Ask the Organizer (6/20)  
 Biking Safely in Traffic (6/24)  
 Healthy Eating Lunch & Learn (6/27)

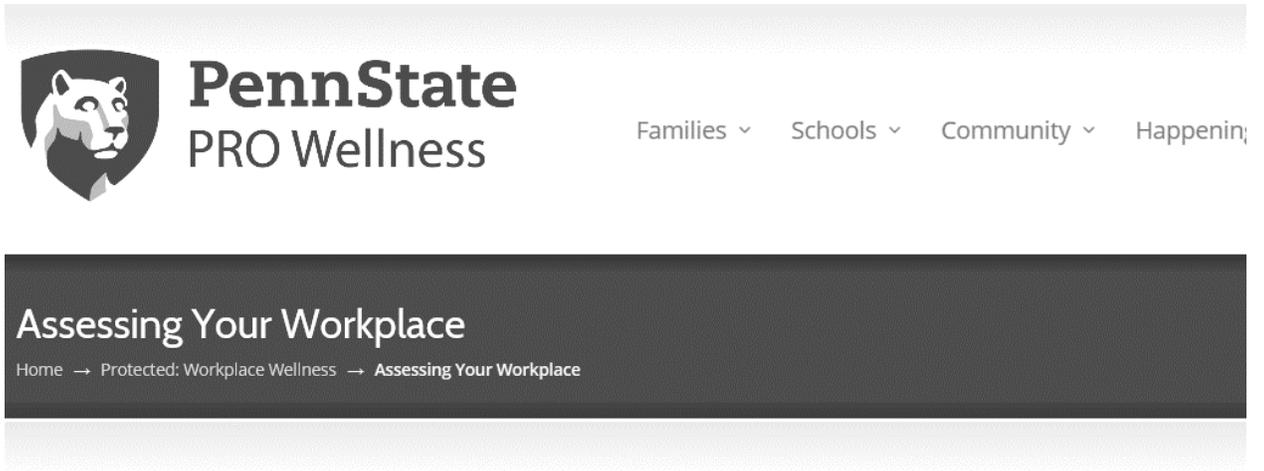
On average this week, how many glasses of water did you drink per day?

On average this week, how many servings of fruit did you consume per day?

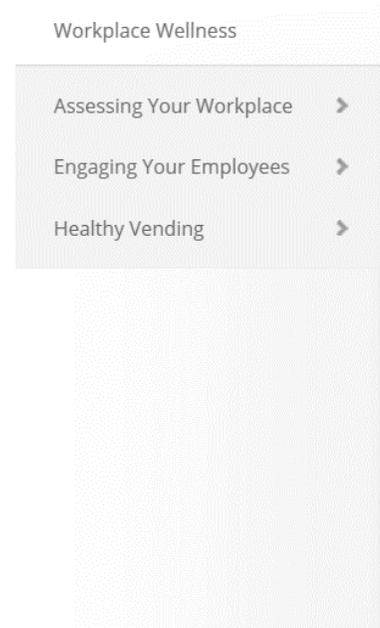
On average this week, how many servings of vegetables did you consume per day?

## APPENDIX B

### PRO Wellness Assessment



The screenshot shows the top navigation bar of the PennState PRO Wellness website. On the left is the Penn State Nittany Lion logo. To its right is the text "PennState PRO Wellness". Further right are four dropdown menu items: "Families", "Schools", "Community", and "Happenin". Below the navigation bar is a dark grey banner with the text "Assessing Your Workplace" in white. Underneath the banner is a breadcrumb trail: "Home → Protected: Workplace Wellness → Assessing Your Workplace".



The screenshot shows a sidebar menu titled "Workplace Wellness". It contains three items, each with a right-pointing chevron: "Assessing Your Workplace", "Engaging Your Employees", and "Healthy Vending".

## Assessing Your Workplace

Industry leaders have developed proven models for worksite wellness. They know the factors that lead to success. Assess your worksite by evaluating the following statements.

### Worksite Evaluation and Assessment Statements

1. Our CEO communicates the importance of wellness.
2. Our CEO allocates staff, budget, space and time to take part in our company's wellness activities.
3. Our CEO participates in our wellness program offerings.
4. Our organization has a wellness team that meets regularly.
5. Our employees complete health risk appraisals.

- 
6. Our company analyzes medical claims to see determine employee health risks.
  7. Our company surveys employees on their health knowledge and interests.
  8. Our company's wellness plan is clear.
  9. Our company's wellness plan is communicated to employees thru various strategies – posters, discussions, emails, etc.
  10. Our company offers various incentives – t-shirts, cash prizes, health plan contributions – for participating in wellness efforts.
  11. Our company offers readily available cold, filtered drinking water.
  12. Our vending machines include zero calorie drinks and healthy snacks.
  13. Our company offers a place to store and prepare food.
  14. Our company has healthy celebration and catering guidelines.
  15. Our company offers flex time for exercise.
  16. There are walking paths/trails near or around my office building.
  17. Our company evaluates corporate culture related to wellness.
  18. Our company measures changes in biometric measures over time.
  19. My company evaluates participation in wellness programs.
  20. My company evaluates employee satisfaction in the wellness programs.

20. My company evaluates employee satisfaction in the wellness programs.
21. My company evaluates any changes in knowledge, behavior and attitudes.

## APPENDIX C

### CDC Worksite Wellness Score Card

*The CDC Worksite Health ScoreCard:*  
**An Assessment Tool to Prevent Heart Disease, Stroke,  
 and Related Conditions Worksheet**



<i>Organizational Supports</i> During the past 12 months, did your worksite:	Yes	No	Score
1. Conduct an employee needs and interests assessment for planning health promotion activities? <i>Answer "yes" if, for example, your organization administers focus groups or employee satisfaction surveys to assess your employee health promotion program(s). Answer "no" if your organization administers general surveys that do not assess your employee health promotion program(s).</i>	<input type="checkbox"/> (1 pts.)	<input type="checkbox"/> (0 pts.)	
2. Conduct employee health risk appraisals/assessments through vendors, on-site staff, or health plans and provide individual feedback plus health education? <i>Answer "yes" if, for example, your organization provides individual feedback through written reports, letters, or one-on-one counseling.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
3. Demonstrate organizational commitment and support of worksite health promotion at all levels of management? <i>Answer "yes" if, for example, all levels of management participate in activities, communications are sent to employees from senior leaders, the worksite supports performance objectives related to healthy workforce, or program ownership is shared with all staff levels.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
4. Use and combine incentives with other strategies to increase participation in health promotion programs? <i>Answer "yes" if, for example, your organization offers incentives such as gift certificates, cash, paid time off, product or service discounts, reduced health insurance premiums, employee recognition, or prizes.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
5. Use competitions when combined with additional interventions to support employees making behavior changes? <i>Answer "yes" if, for example, your organization offers walking or weight loss competitions.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	

<b>Organizational Supports</b> <i>During the past 12 months, did your worksite:</i>	<b>Yes</b>	<b>No</b>	<b>Score</b>
6. Promote and market health promotion programs to employees? <i>Answer "yes" if, for example, your worksite's health promotion program has a brand name or logo, uses multiple channels of communication, or sends frequent messages.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
7. Use examples of employees role modeling appropriate health behaviors or employee health-related "success stories" in the marketing materials?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
8. Tailor some health promotion programs and education materials to the language, literacy levels, culture, or readiness to change of various segments of the workforce? <i>Answer "no" if you do not perceive a need for your organization to tailor its health promotion programs and education materials to any specific group(s).</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
9. Have an active health promotion committee? <i>Answer "yes" if your health promotion committee exists and has been involved in planning and implementing programs.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
10. Have a paid health promotion coordinator whose job (either part-time or full-time) is to implement a worksite health promotion program? <i>Answer "yes" if implementing the employee health promotion program(s) at your worksite is included in a paid staff member's job description or performance expectations.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
11. Have a champion(s) who is a strong advocate for the health promotion program? <i>Answer "yes" if there is someone at your worksite who actively promotes programs to improve worksite health promotion.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
12. Have an annual budget or receive dedicated funding for health promotion programs?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
13. Set annual organizational objectives for health promotion?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
14. Include references to improving or maintaining employee health in the business objectives or organizational mission statement? <i>Answer "no" if your organization's business objectives or mission statement only reference occupational health and safety, without reference to improving the workforce's health.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	

<b>Organizational Supports</b> <i>During the past 12 months, did your worksite:</i>	<b>Yes</b>	<b>No</b>	<b>Score</b>
15. Conduct ongoing evaluations of health promotion programming that use multiple data sources? <i>Answer "yes" if, for example, your organization collects data on employee health risks, medical claims, employee satisfaction, or organizational climate surveys.</i>	<input type="checkbox"/> (2 pt.)	<input type="checkbox"/> (0 pts.)	
16. Make any health promotion programs available to family members?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
17. Provide flexible work scheduling policies? <i>Answer "yes" if, for example, policies allow for flextime schedules and work at home.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
18. Engage in other health initiatives throughout the community and support employee participation and volunteer efforts? <i>Answer "yes" if, for example, your organization supports participation in community events and school-based efforts, such as corporate walks, collaborate with state and local advocacy groups, health and regulatory organizations, and coalitions.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Organizational Supports Section Score:</b>			
<b>Maximum Organizational Supports Section Score:</b>			<b>33</b>

## Tobacco Control



<i>Tobacco Control</i> During the past 12 months, did your worksite:	Yes	No	Score
19. Have a written policy banning tobacco use at your worksite? <i>Answer "yes" if your worksite adheres to a statewide, countywide, or citywide policy banning tobacco use in the workplace.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
20. Actively enforce a written policy banning tobacco use? <i>Answer "yes" if, for example, your worksite posts signs, does not have ashtrays, or communicates this written policy banning tobacco use through various channels at your worksite.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
21. Display signs (including 'no smoking' signs) with information about your tobacco-use policy?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
22. Refer tobacco users to a state or other tobacco cessation telephone quit line? <i>Answer "yes" if, for example, your worksite refers tobacco users to 1-800-QUIT NOW or smokefree.gov.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
23. Provide health insurance coverage with no or low out-of-pocket costs for prescription tobacco cessation medications including nicotine replacement? <i>Answer "yes" if, for example, your organization provides coverage for inhalers, nasal sprays, bupropion (e.g., Zyban) and varenicline (e.g., Chantix).</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
24. Provide health insurance coverage with no or low out-of-pocket costs for FDA-approved over-the-counter nicotine replacement products? <i>Answer "yes" if, for example, your organization provides coverage for nicotine replacement gum, patches, or lozenges.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
25. Provide or promote free or subsidized tobacco cessation counseling? <i>Answer "yes" if these programs are provided on- or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	

<i>Tobacco Control</i>				
<i>During the past 12 months, did your worksite:</i>		<i>Yes</i>	<i>No</i>	<i>Score</i>
26.	Inform employees about health insurance coverage or programs that include tobacco cessation medication and counseling?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
27.	Provide incentives for being a current nonuser of tobacco and for current tobacco users that are currently involved in a cessation class or actively quitting? <i>Answer "yes" if, for example, your organization provides discounts on health insurance, or other benefits for non-smokers and tobacco users who are actively trying to quit.</i>	<input type="checkbox"/> (1 pts.)	<input type="checkbox"/> (0 pts.)	
28.	Do not allow sale of tobacco products on company property? <i>Answer "yes" if, for example, your worksite does not sell tobacco products on company property in vending machines or through on-site vendors.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Tobacco Control Section Score:</b>				
<b>Maximum Tobacco Control Section Score:</b>				<b>19</b>

## Nutrition



<i>Nutrition</i> <i>During the past 12 months, did your worksite:</i>	<i>Yes</i>	<i>No</i>	<i>Score</i>
<p>29. Provide places to purchase food and beverages?  <i>Answer "yes" if, for example, your worksite provides vending machines, cafeterias, snack bars, or other purchase points. IF NO, PLEASE SKIP TO QUESTION 36.</i></p>	<input type="checkbox"/> (0 pts.)	<input type="checkbox"/> (0 pts.)	question not scored
<p>30. Have a written policy or formal communication that makes healthier food and beverage choices available in cafeterias or snack bars?  <i>Answer "yes" if, for example, the policy or formal communication makes vegetables, fruits, 100% fruit juices, whole grain items and trans fat-free or low-sodium snacks available in cafeterias or snack bars.</i></p>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
<p>31. Have a written policy or formal communication that makes healthier food and beverage choices available in vending machines?  <i>Answer "yes" if, for example, the policy or formal communication makes vegetables, fruits, 100% fruit juices, whole grain items and trans fat-free/low-sodium snacks available in vending machines.</i></p>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
<p>32. Make most (more than 50%) of the food and beverage choices available in vending machines, cafeterias, snack bars, or other purchase points be healthier food items?  <i>Answer "yes" if the healthy foods are items such as skim milk, 1% milk, water, unsweetened flavored water, diet drinks, 100% fruit juice, low-fat and low-sodium snacks, or fresh fruit. (See Dietary Guidelines for Americans, 2010 or GSA/HHS Health and Sustainability Guidelines for Federal Concessions and Vending Operations.)</i></p>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
<p>33. Provide nutritional information (beyond standard nutrition information on labels) on sodium, calories, trans fats, or saturated fats for foods and beverages sold in worksite cafeterias, snack bars, or other purchase points?</p>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
<p>34. Identify healthier food and beverage choices with signs or symbols?♥  <i>Answer "yes" if, for example, your worksite puts a heart next to a healthy item near vending machines, cafeterias, snack bars, or other purchase points.</i></p>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	

<i>Nutrition</i> <i>During the past 12 months, did your worksite:</i>	<i>Yes</i>	<i>No</i>	<i>Score</i>
35. Subsidize or provide discounts on healthier foods and beverages offered in vending machines, cafeterias, snack bars, or other purchase points?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
36. Have a written policy or formal communication which makes healthier food and beverage choices available during meetings when food is served? <i>Answer "yes" if, for example, the policy or formal communication makes vegetables, fruits, 100% fruit juices, whole grain items or trans fat-free/low-sodium snacks available during meetings.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
37. Provide employees with food preparation and storage facilities? <i>Answer "yes" if your worksite provides a microwave oven, sink, refrigerator and/or kitchen.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
38. Offer or promote an on-site or nearby farmers' market where fresh fruits and vegetables are sold?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
39. Provide brochures, videos, posters, pamphlets, newsletters, or other written or online information that address the benefits of healthy eating? <i>Answer "yes" if these health promotion materials address the benefits of healthy eating as a single health topic or if the benefits of healthy eating are included with other health topics.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
40. Provide a series of educational seminars, workshops, or classes on nutrition? <i>Answer "yes" if these sessions address nutrition as a single health topic or if nutrition is included with other health topics. These sessions can be provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
41. Provide free or subsidized self-management programs for healthy eating? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans and programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Nutrition Section Score:</b>			
<b>Maximum Nutrition Section Score:</b>			<b>21</b>

## Lactation Support



<i>Lactation Support</i> During the past 12 months, did your worksite:	Yes	No	Score
42. Have a written policy on breastfeeding for employees? <i>Answer "yes" if the policy is included as a component of other employee policies or is a separate policy related to breastfeeding.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
43. Provide a private space (other than a restroom) that may be used by an employee to express breast milk?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
44. Provide access to a breast pump at the worksite?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
45. Provide flexible paid or unpaid break times to allow mothers to pump breast milk?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
46. Provide free or subsidized breastfeeding support groups or educational classes? <i>Answer "yes" if these sessions address breastfeeding as a single health topic or if breastfeeding is included with other health topics. These sessions can be provided in-person or online; onsite or offsite; in group or individual settings; through vendors, on-site staff, health insurance plans/programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
47. Offer paid maternity leave, separate from any accrued sick leave, annual leave, or vacation time?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Lactation Support Section Score:</b>			
<b>Maximum Lactation Support Section Score:</b>			<b>15</b>

## Physical Activity



<i>Physical Activity</i> During the past 12 months, did your worksite:	Yes	No	Score
48. Provide an exercise facility on-site?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
49. Subsidize or discount the cost of on-site or offsite exercise facilities?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
50. Provide environmental supports for recreation or physical activity? <i>Answer "yes" if, for example, your worksite provides trails or a track for walking/jogging, maps of suitable walking routes, bicycle racks, a basketball court, open space designated for recreation or exercise, a shower and changing facility.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
51. Post signs at elevators, stairwell entrances or exits and other key locations that encourage employees to use the stairs? <i>Answer "no" if your worksite is located in a one-story building.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
52. Provide organized individual or group physical activity programs for employees (other than the use of an exercise facility)? <i>Answer "yes" if, for example, your worksite provides walking or stretching programs, group exercise, or weight training.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
53. Provide brochures, videos, posters, pamphlets, newsletters, or other written or online information that address the benefits of physical activity? <i>Answer "yes" if these health promotion materials address the benefits of physical activity as a single health topic or if the benefits of physical activity are included with other health topics.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
54. Provide a series of educational seminars, workshops, or classes on physical activity? <i>Answer "yes" if these sessions address physical activity as a single health topic or if physical activity is included with other health topics. These sessions can be provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	

<i>Physical Activity</i> <i>During the past 12 months, did your worksite:</i>	<i>Yes</i>	<i>No</i>	<i>Score</i>
55. Provide or subsidize physical fitness assessments, follow-up counseling, and physical activity recommendations either on-site or through a community exercise facility?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
56. Provide free or subsidized self-management programs for physical activity? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Physical Activity Section Score:</b>			
<b>Maximum Physical Activity Section Score:</b>			<b>24</b>

## Weight Management



<i>Weight Management</i> <i>During the past 12 months, did your worksite:</i>	<i>Yes</i>	<i>No</i>	<i>Score</i>
57. Provide free or subsidized body composition measurement, such as height and weight, Body Mass Index (BMI) scores, or other body fat assessments (beyond self-report) followed by directed feedback and clinical referral when appropriate?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
58. Provide brochures, videos, posters, pamphlets, newsletters, or other written or online information that address the risks of overweight or obesity? <i>Answer "yes" if these health promotion materials address the risks of overweight or obesity as a single health topic or if the risks of overweight or obesity are included with other health topics.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
59. Provide a series of educational seminars, workshops, or classes on weight management? <i>Answer "yes" if these sessions address weight management as a single health topic or if weight management is included with other health topics. These sessions can be provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
60. Provide free or subsidized one-on-one or group lifestyle counseling for employees who are overweight or obese? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
61. Provide free or subsidized self-management programs for weight management? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Weight Management Section Score:</b>			
<b>Maximum Weight Management Section Score:</b>			<b>12</b>

## Stress Management



<i>Stress Management</i> During the past 12 months, did your worksite:	Yes	No	Score
62. Provide dedicated space that is quiet where employees can engage in relaxation activities, such as deep breathing exercises?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
63. Sponsor or organize social events throughout the year? <i>Answer "yes" if, for example, your worksite sponsors or organizes team building events, company picnics, holiday parties, or employee sports teams.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
64. Provide stress management programs? <i>Answer "yes" if these programs address stress management as a single health topic or if stress management is included with other health topics. Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
65. Provide work-life balance/ life-skills programs? <i>Answer "yes" if, for example, your worksite provides elder care, child care, referrals, tuition reimbursement, or other programs that are offered through vendors, on-site staff, or employee assistance programs.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
66. Provide training for managers on identifying and reducing workplace stress-related issues? <i>Answer "yes" if, for example, your worksite provides training on performance reviews, communication, personnel management, assertiveness, time management, or conflict resolution.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
67. Provide opportunities for employee participation in organizational decisions regarding workplace issues that affect job stress? <i>Answer "yes" if, for example, your worksite provides opportunities for employees to participate in decisions about work processes and environment, work schedules, participative problem-solving, and management of work demands.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Stress Management Section Score:</b>			
<b>Maximum Stress Management Section Score:</b>			<b>14</b>

## Depression



<i>Depression</i> During the past 12 months, did your worksite:	Yes	No	Score
68. Provide free or subsidized clinical screening for depression (beyond self-report) followed-by directed feedback and clinical referral when appropriate? <i>Answer "yes" if these services are provided directly through your organization or indirectly through a health insurance plan.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
69. Provide access to online or paper self-assessment depression screening tools?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
70. Provide brochures, videos, posters, pamphlets, newsletters, or other written or online information that address depression? <i>Answer "yes" if these health promotion materials address depression as a single health topic or if depression is included with other health topics.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
71. Provide a series of educational seminars, workshops, or classes on preventing and treating depression? <i>Answer "yes" if these sessions address depression as a single health topic or if depression is included with other health topics. These sessions can be provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
72. Provide one-on-one or group lifestyle counseling for employees with depression? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans and programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
73. Provide training for managers on depression in the workplace? <i>Answer "yes" if, for example, your worksite provides managers with training on how to recognize depression, productivity or safety issues, and company or community resources for managing depression.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	

<i>Depression</i>			
<i>During the past 12 months, did your worksite:</i>			
	<i>Yes</i>	<i>No</i>	<i>Score</i>
74. Provide health insurance coverage with no or low out-of-pocket costs for depression medications and mental health counseling?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Depression Section Score:</b>			
<b>Maximum Depression Section Score:</b>			<b>18</b>

## High Blood Pressure



<i>High Blood Pressure</i> During the past 12 months, did your worksite:	Yes	No	Score
75. Provide free or subsidized blood pressure screening (beyond self-report) followed by directed feedback and clinical referral when appropriate?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
76. Provide brochures, videos, posters, pamphlets, newsletters, or other written or online information that address the risks of high blood pressure? <i>Answer "yes" if these health promotion materials address the risks of high blood pressure as a single health topic or if the risks of high blood pressure are included with other health topics.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
77. Provide a series of educational seminars, workshops, or classes on preventing and controlling high blood pressure? <i>Answer "yes" if these sessions address preventing or controlling high blood pressure as a single health topic or if preventing and controlling high blood pressure are included with other health topics. These sessions can be provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
78. Provide one-on-one or group lifestyle counseling and follow-up monitoring for employees with high blood pressure or pre-hypertension? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
79. Provide free or subsidized self-management programs for blood pressure control and prevention? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	

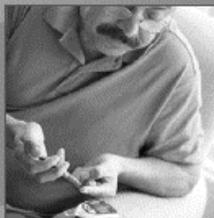
<i>High Blood Pressure</i>			
<i>During the past 12 months, did your worksite:</i>			
	<i>Yes</i>	<i>No</i>	<i>Score</i>
80. Make blood pressure monitoring devices available with instructions for employees to conduct their own self assessments?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
81. Provide health insurance coverage with no or low out-of-pocket costs for blood pressure control medications?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's High Blood Pressure Section Score:</b>			
<b>Maximum High Blood Pressure Section Score:</b>			<b>17</b>

## High Cholesterol

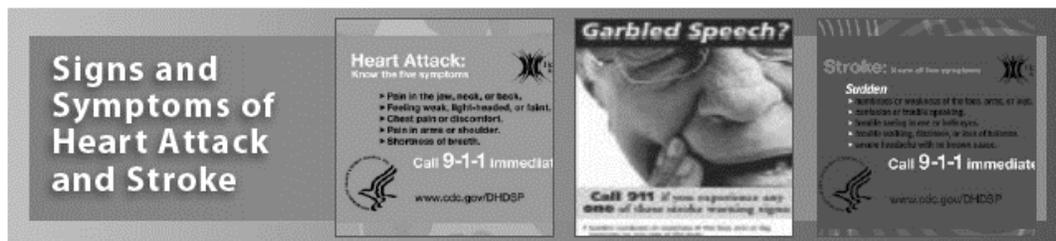


<i>High Cholesterol</i> During the past 12 months, did your worksite:		Yes	No	Score
82.	Provide free or subsidized cholesterol screening (beyond self-report) followed by directed feedback and clinical referral when appropriate?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
83.	Provide brochures, videos, posters, pamphlets, newsletters, or other written or online information that address the risks of high cholesterol? <i>Answer "yes" if these health promotion materials address the risks of high cholesterol as a single health topic or if the risks of high cholesterol are included with other health topics.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
84.	Provide a series of educational seminars, workshops, or classes on preventing and controlling high cholesterol? <i>Answer "yes" if these sessions address preventing and controlling high cholesterol as a single health topic or if preventing and controlling high cholesterol are included with other health topics. These sessions can be provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
85.	Provide one-on-one or group lifestyle counseling and follow-up monitoring for employees who have high cholesterol? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
86.	Provide free or subsidized self-management programs for cholesterol or lipid control? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans and programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
87.	Provide health insurance coverage no or low out-of-pocket costs for cholesterol or lipid control medications?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's High Cholesterol Section Score:</b>				
<b>Maximum High Cholesterol Section Score:</b>				<b>15</b>

## Diabetes



<i>Diabetes</i>			
<i>During the past 12 months, did your worksite:</i>	<i>Yes</i>	<i>No</i>	<i>Score</i>
88. Provide free or subsidized pre-diabetes and diabetes risk factor assessment (beyond self-report) and feedback, followed by blood glucose screening and/or clinical referral when appropriate?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
89. Provide brochures, videos, posters, pamphlets, newsletters, or other written or online information that address the risks of diabetes? <i>Answer "yes" if these health promotion materials address the risks of diabetes as a single health topic or if the risks of diabetes are included with other health topics.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
90. Provide a series of educational seminars, workshops, or classes on preventing and controlling diabetes? <i>Answer "yes" if these sessions address preventing and controlling diabetes as a single health topic or if preventing and controlling diabetes are included with other health topics. These sessions can be provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
91. Provide one-on-one or group lifestyle counseling and follow-up monitoring for employees who have abnormal blood glucose levels (pre-diabetes or diabetes)? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
92. Provide free or subsidized self-management programs for diabetes control? <i>Answer "yes" if these programs are provided in-person or online; on-site or off-site; in group or individual settings; through vendors, on-site staff, health insurance plans or programs, community groups, or other practitioners.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
93. Provide health insurance coverage with no or low out-of-pocket costs for diabetes medications and supplies for diabetes management (glucose test strips, needles, monitoring kits)?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Diabetes Section Score:</b>			
<b>Maximum Diabetes Section Score:</b>			<b>15</b>



<i>Signs and Symptoms of Heart Attack and Stroke</i>			
<i>During the past 12 months, did your worksite:</i>			
	<i>Yes</i>	<i>No</i>	<i>Score</i>
94. Have posters or flyers in the common areas of your worksite (such as bulletin boards, kiosks, break rooms) that identify the signs and symptoms of a heart attack and also convey that heart attacks are to be treated as emergencies?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
95. Have posters or flyers in the common areas of your worksite (such as bulletin boards, kiosks, break rooms) that identify the signs and symptoms of a stroke and also convey that strokes are to be treated as emergencies?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
96. Provide any other information on the signs and symptoms of heart attack through emails, newsletters, management communications, Web sites, seminars or classes?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
97. Provide any other information on the signs and symptoms of stroke through e-mails, newsletters, management communications, Web sites, seminars or classes?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Signs and Symptoms of Heart Attack and Stroke Section Score:</b>			
<b>Maximum Signs and Symptoms of Heart Attack and Stroke Section Score:</b>			<b>4</b>

## Emergency Response to Heart Attack and Stroke



<i>Emergency Response to Heart Attack and Stroke</i> <i>During the past 12 months, did your worksite:</i>	<i>Yes</i>	<i>No</i>	<i>Score</i>
98. Have an emergency response plan that addresses acute heart attack and stroke events?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
99. Have an emergency response team for medical emergencies?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
100. Offer access to a nationally-recognized training course on Cardiopulmonary Resuscitation (CPR) that includes training on Automated External Defibrillator (AED) usage?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
101. Have a policy that requires an adequate number of employees per floor, work unit, or shift, in accordance with pertinent state and federal laws, to be certified in CPR/AED?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
102. Have one or more functioning AEDs in place? <i>IF NO, PLEASE SKIP TO QUESTION 107.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
103. Have an adequate number of AED units such that a person can be reached within 3–5 minutes of collapse?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
104. Identify the location of AEDS with posters, signs, markers, or other forms of communication other than on the AED itself?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
105. Perform routine maintenance or testing on all AEDs?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
106. Provide information to your local community Emergency Medical Service providers so they are aware that your worksite has an AED in place for an emergency response?	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Emergency Response to Heart Attack and Stroke Section Score:</b>			
<b>Maximum Emergency Response to Heart Attack and Stroke Section Score:</b>			<b>17</b>

## Occupational Health and Safety



<i>Occupational Health and Safety</i> <i>During the past 12 months, did your worksite:</i>	<i>Yes</i>	<i>No</i>	<i>Score</i>
107. Include improving or maintaining job health and safety in the business objectives or organizational mission statement? <i>Answer "yes" if any written vision, planning, or guideline documents include language about improving or maintaining worker health and safety.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
108. Have a written injury and/or illness prevention program? <i>Answer "yes" if there is a written policy, whether or not it is posted.</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
109. Employ or contract for an occupational health and safety professional? <i>Answer "yes" if anyone is employed or contracted whose job includes improving health safety: example include occupational nurse, safety manager, environmental health manager, ergonomist, an insurance safety specialist who visits regularly.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
110. Encourage reporting of injuries and near misses? <i>Answer "yes" if there is written and/or verbal encouragement to report injuries, illnesses, or near misses.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
111. Provide opportunities for employee input on hazards and solutions? <i>Answer "yes" if, for example, there were all-hands meetings, tool box meetings, surveys, or focus groups for discovering and solving job health and/or safety issues.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
112. Have a program to investigate the causes of injuries or illnesses? <i>Answer "yes" if, for example, there were all-hands meetings, tool box meetings, surveys, or focus groups for discovering and solving job health and/or safety issues.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
113. Provide informational materials about health and safety at work to employees in most departments? <i>Answer "yes" if, for example, there are health and safety newsletters, fact sheets, posters, LED displays, emails, letters, broadcast messages, or other communications provided to employees.</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	

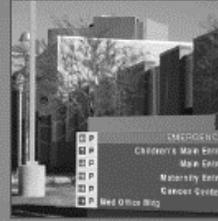
<b>Occupational Health and Safety</b> <i>During the past 12 months, did your worksite:</i>		<b>Yes</b>	<b>No</b>	<b>Score</b>
114.	Provide all new workers formal, comprehensive training on how to avoid accidents or injury on the job?	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
115.	Coordinate programs for occupational health and safety with program for health promotion and wellness? <i>Answer "yes" if, for example a new safety initiative also includes a wellness component such as attention to diet, physical activity, smoking, etc.).</i>	<input type="checkbox"/> (2 pts.)	<input type="checkbox"/> (0 pts.)	
116. Have the following policies or benefits for employees been in place?				
116A.	Paid time off (PTO) for days or hours due to illness of employees or dependents (full-time, non-exempt employees). <i>[Note: non-exempt employees are those who are eligible to receive overtime pay if they work more than 40 hours in a week. Typically they are hourly workers.]</i>	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
116B.	Paid vacation time or personal days or hours to full-time, non-exempt employees).	<input type="checkbox"/> (1 pt.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Occupational Health and Safety Section Score:</b>				
<b>Maximum Occupational Health and Safety Section Score:</b>				<b>22</b>

## Vaccine-Preventable Diseases



<i>Vaccine-Preventable Diseases (VPD)</i> During the past 12 months, did your worksite:	Yes	No	Score
117. Provide health insurance coverage with no or low out-of-pocket costs for influenza (flu) vaccination?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
118. Provide health insurance coverage with no or low out-of-pocket costs for vaccinations other than influenza (flu) (e.g., pneumococcal or Tdap vaccines)?	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
119. Conduct influenza (flu) vaccinations at your worksite? <i>Answer "yes" if these offerings happen one or more times a year; are set up as either a temporary vaccine clinic run by an outside organization, internal occupational health staff or other arrangement. IF NO, PLEASE PROCEED TO QUESTION NUMBER 121.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
120. Provide influenza (flu) vaccinations at your worksite with no or low out-of-pocket costs to employees? <i>Answer "yes" if these offerings happen one or more times a year; are set up as either a temporary vaccine clinic run by an outside organization, internal occupational health staff or other arrangement.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
121. Provide vaccinations other than seasonal influenza (e.g., pneumococcal or Tdap) at your worksite with no or low out-of-pocket costs to employees? <i>Answer "yes" if these offerings happen one or more times a year; are set up as either a temporary vaccine clinic run by an outside organization, internal occupational health staff or other arrangement.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
122. Promote influenza (flu) vaccinations through brochures, videos, posters, pamphlets, newsletters or other written or online information that address the benefits of influenza vaccinations? <i>Answer "yes" if these health promotion materials address the risks and benefits of influenza vaccination as a single health topic or if the benefits of influenza vaccinations are included with other health topics.</i>	<input type="checkbox"/> (3 pts.)	<input type="checkbox"/> (0 pts.)	
<b>Your Worksite's Vaccine-Preventable Diseases Score:</b>			
<b>Maximum Vaccine-Preventable Diseases Score:</b>			<b>18</b>

## Community Resources



<i>Community Resources</i> During the past 12 months, did your worksite:	<i>Yes</i>	<i>No</i>
123. Provide employees with health related information, programs, or resources from any of the following organizations (not including your own organization)? <i>Respond "yes" or "no" to all questions. Answer "yes" if health information, programs, or resources are provided in-person or online; on-site or off-site; or in group or individual settings.</i>		
123A. State/local public health agency		
123B. Health insurance plan		
123C. Health management program and/or wellness program provider/vendor		
123D. Workers compensation provider		
123E. Health-related organizations (such as the American Heart Association, American Cancer Society, etc).		
123F. Health insurance broker		
123G. Hospital		
123H. YMCA		
123I. Community Organization or Business Group (Wellness Council, Chamber of Commerce or other business group)		
123J. Other: _____ _____  <i>Respond "yes" if you work with an organization not listed above such as an Employee Assistance Program, Food Services, etc. to provide health information, programs, or resources to employees.</i>		

<i>Community Resources</i>			
<i>During the past 12 months, did your worksite:</i>		<i>Yes</i>	<i>No</i>
124. Receive consultation, guidance, advise, training, and/or direction from any of the following organizations related to the design and delivery of a worksite wellness program? <i>Respond "yes" or "no" to all questions.</i>			
124A. State/local public health agency			
124B. Health insurance plan			
124C. Health management program and/or wellness program provider/vendor			
124D. Workers compensation provider			
124E. Health Related Organizations (such as the American Heart Association, American Cancer Society, etc).			
124F. Health insurance broker			
124G. Hospital			
124H. YMCA			
124I. Community or Business Organization (Wellness Council, Chamber of Commerce or other business group)			
124J. Other: _____ _____  <i>Respond "yes" if you work with an organization not listed above such as an Employee Assistance Program, Food Services, etc. to provide health information, programs, or resources to employees.</i>			
125. Participate in any Community Coalitions focused on health or business and community partnerships?			

**END OF SURVEY  
THANK YOU FOR COMPLETING THIS SURVEY!**

## CDC Worksite Health ScoreCard

You may use the following table to summarize your topic section scores. If you would like to compare them against other employers' scores, proceed to the HSC Validation Study Benchmarking Report on the next page.

SUMMARY SCORE TABLE		
Section:	Total Points Possible:	Your Worksite's Score:
Organizational Supports	33	
Tobacco Control	19	
Nutrition	21	
Lactation Support	15	
Physical Activity	24	
Weight Management	12	
Stress Management	14	
Depression	18	
High Blood Pressure	17	
High Cholesterol	15	
Diabetes	15	
Signs and Symptoms of Heart Attack and Stroke	4	
Emergency Response to Heart Attack and Stroke	17	
Occupational Health and Safety	22	
Vaccine-Preventable Disease	18	
Community Resources	N/A	
<b>TOTAL</b>	<b>264</b>	

