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# Health Promotion in Smaller Workplaces in the United States

Jeffrey R. Harris<sup>1</sup>, Peggy A. Hannon<sup>1</sup>, Shirley A.A. Beresford<sup>1</sup>, Laura A. Linnan<sup>2</sup>, Deborah L. McLellan<sup>3</sup>

<sup>1</sup>Department of Health Services, School of Public Health, University of Washington, Seattle, Washington 98105

<sup>2</sup>Department of Health Behavior, Gillings School of Public Health, University of North Carolina, Chapel Hill, North Carolina 27599

<sup>3</sup>Center for Community-Based Research, Dana-Farber Cancer Institute, Boston, Massachusetts 02215

#### Abstract

Most American workplaces are smaller, with fewer than 1,000 employees. Many of these employees are low-wage earners and at increased risk for chronic diseases. Owing to the challenges smaller workplaces face to offering health-promotion programs, their employees often lack access to health-promotion opportunities available at larger workplaces. Many smaller employers do not offer health insurance, which is currently the major funding vehicle for health-promotion services. They also have few health-promotion vendors to serve them and low internal capacity for, and commitment to, delivery of on-site programs. The programs they offer, whether aimed at health promotion alone or integrated with health protection, are rarely comprehensive and are understudied. Research priorities for health promotion in smaller workplaces include developing programs feasible for the smallest workplaces with fewer than 20 employees. Policy priorities include incentives for smaller workplaces to implement comprehensive programs and an ongoing system for monitoring and evaluation.

## **Keywords**

chronic disease; exercise; obesity; prevention and control; tobacco; workplace

# INTRODUCTION

Workplaces provide an important opportunity for promoting population health. Most adults in the United States are employed and, most days, spend half of their waking hours at work (75). Both the socioecological framework for improving population health (52) and Fielding & Teutsch's more recent Opportunity Map (23) emphasize the importance of community-based sites such as workplaces for reaching adults and shaping their health behaviors. In the United States, with its primarily employer-based health-insurance system, employers have an incentive to promote employee health to keep productivity high and health care costs low. A recent review suggests that well-implemented workplace health-promotion programs can provide returns on investment as high as 6-to-1, roughly half the economic benefits of which coming from lower health care costs and half from employee productivity gains (6). Goetzel

et al. (26) published an authoritative review of the positive effects of such programs in 2008. Much of the literature in that review, however, discussed large workplaces.

In contrast, this review focuses on chronic disease prevention in smaller workplaces (those with fewer than 1,000 employees). About half of American employees (77) work in smaller workplaces, and these workplaces represent an important but challenging opportunity for health promotion. Beginning with definitions and frameworks, the review describes the characteristics of smaller workplaces and their employees, the challenges and opportunities they face in implementing workplace health-promotion programs, and successful intervention approaches in these workplaces. Our review ends with a research and policy agenda for improving health promotion in smaller workplaces.

# DEFINITIONS OF SMALLER WORKPLACES AND WORKPLACE HEALTH PROMOTION

To aid readers, we define and distinguish among employers, workplaces, and worksites. Employers are organizations, public or private, with employees. A workplace includes not only the physical location of work, but also the social, cultural, and policy environment created by an employer. We deliberately differentiate more broadly defined workplaces, often with multiple locations, from more narrowly defined physical worksites, the locations where employees actually work.

Smaller workplaces are defined in multiple ways. Health insurers often define small workplaces as having <50 employees (see http://www.healthcare.gov/using-insurance/employers/index.html); the Kaiser Family Foundation defines them as having <200 employees (39), and the US Small Business Administration defines them as having <500 employees (76). Similarly, definitions vary for medium-sized workplaces. Recent national surveys have used upper limits of 750 (46), 999 (14), and 4,999 employees (29). In this review, we define small and medium-sized workplaces as having 1,000 or fewer employees and, for the sake of brevity, refer to them collectively as smaller workplaces. When citing work using a different definition, we note that definition in parentheses.

Green & Kreuter (27) define health promotion as "any planned combination of educational, political, regulatory, and organizational supports for actions and conditions of living conducive to the health of individuals, groups, or communities" (p. G-4). In this review, we apply that definition of health promotion in the workplace. We also consider the comprehensiveness of workplace health-promotion programs. To be considered comprehensive, programs must have all five key elements outlined in *Healthy People 2010*. (a) health education, (b) a supportive social and physical work environment, (c) integration of the program into the organization's structure, (d) linkage to related programs such as employee assistance programs, and (e) workplace screening and education (73).

## **WORKPLACE HEALTH-PROMOTION FRAMEWORKS**

In this section, we describe two frameworks that shaped our review of health promotion in smaller workplaces. O'Donnell's (57) workplace health-promotion framework was

developed explicitly for the workplace context and provides a useful categorization of activities that employers, researchers, insurers, and vendors offer. The socioecological framework (52) addresses health promotion broadly, is widely used, and provides a useful categorization of the levels of change that a program targets. Each of these frameworks provides a valuable lens, described below, for discussing the current state of workplace health promotion in smaller workplaces and suggests future research and practice opportunities.

O'Donnell (57) describes workplace health promotion as falling into three types of activities: awareness, lifestyle change, and supportive environment. Awareness programs usually involve communications (e.g., newsletters, posters) and events (e.g., health fairs, screening events, or assessments without feedback) that may increase employees' awareness of a health topic. Awareness programs alone rarely cause behavior change. Lifestyle change programs are participatory programs lasting weeks or months and may involve health education combined with behavior modification, practice, and feedback. Both awareness and lifestyle-change workplace programs attempt to directly influence employee health behavior, may happen on-site or off-site, and are often offered by insurers or workplace health-promotion vendors with the intent that employees participate outside of work hours. Supportive environment programs modify workplace policies (e.g., creating a written policy that all company meetings and events will include healthy food choices), environment (e.g., modifying vending machines so that half of the options are healthy), and culture (e.g., gradually changing norms about bringing junk food to the office each Friday), with the goal of influencing employee health behavior via these changes. Supportive environment programs happen largely on-site.

The socioecological framework (52) characterizes health-promotion programs as targeting change at individual, interpersonal, organization, community, or policy levels; workplaces typically occupy the organization level. However, workplace health-promotion programs have the potential to address all levels in the socioecological framework. Physical activity programs can be aimed at the individual level (e.g., wellness newsletters with information about the benefits of physical activity, self-help manuals), the interpersonal relationships level (e.g., physical activity programs with a social-support component), the organizational level (e.g., policy allowing extended work breaks for physical activity), or the community level (e.g., forming partnerships with nearby parks or fitness centers). Public policies can provide incentives to employers to promote physical activity in these ways (see Figure 1).

# CHARACTERISTICS OF SMALLER WORKPLACES, THEIR EMPLOYEES, AND THEIR HEALTH-PROMOTION PROGRAMS

In 2010 the United States had more than 5.7 million smaller workplaces, constituting 99.8% of all workplaces. Of these smaller workplaces, 90% employed fewer than 20 people. Smaller workplaces employ over half of the nation's private-sector employees (71); the largest sectors are health care and social assistance, accommodation and food services, retail trade, manufacturing, and professional, scientific, and technical services (71, 77).

Compared with large workplaces, smaller ones are more likely to employ low-wage employees, who are often at increased risk for chronic diseases (9, 74). Among workplaces with fewer than 10 employees, 60% report that more than half of their employees earn low wages (\$11.50 per hour in 2011), as do 11% of workplaces with 10–24 employees, 7% of those with 25–99 employees, 7% of those with 100–999 employees, and 15% of those with >1,000 employees. Compared with higher-wage employees, low-wage employees, who often also have low levels of education, are more likely to be of minority race and ethnicity; have higher levels of smoking, physical inactivity, and obesity; and underuse clinical preventive services including influenza vaccination and cancer and cholesterol screening (35). They also report more coronary artery disease, diabetes, and hypertension, as well as lower health status and more poor-health days (35).

Compared with large workplaces, smaller workplaces offer fewer, and less-comprehensive, workplace health-promotion programs. Smaller employers are less likely to offer their employees workplace health-promotion programs of all kinds (Table 1, which likely overestimates program prevalence because it is limited to employers that also offer health insurance) (39). Smaller employers are also less likely to offer comprehensive programs. Of workplaces with 50–99 employees, 5% offer comprehensive programs, as do 6%, 11%, and 24%, respectively, of those with 100–249, 250–749, and 750 employees (46).

# ADVANTAGES AND CHALLENGES SMALLER WORKPLACES FACE IN WORKPLACE HEALTH PROMOTION

Smaller workplaces have some advantages in implementing workplace health promotion. They have fewer hierarchical layers, which can make policy and program changes easier (48). Their more intimate work culture can help promote participation in workplace health promotion (36, 53). Their senior leaders may be more visible and accessible and therefore be strong health-promotion champions (26).

Although these advantages can help smaller workplaces implement health-promotion programs, they are often countered by the challenges described below. We draw from dissemination and implementation science frameworks to explore why smaller workplaces generally offer less health promotion than do larger workplaces (28, 33, 78). To capture the challenges smaller workplaces face, we use three framework elements: context, readiness, and capacity.

## **Contextual Challenges**

Context is the environment beyond the workplace (e.g., policies, including incentives and mandates, and economics). We discuss policies in the Policy Needs section, near the end of the article, and economics here. Economics can be particularly challenging for smaller workplaces (33). Only half of smaller employers survive for five or more years (77), so they may be reluctant to invest in workplace health-promotion programs. Lower profit margins for many smaller employers (26) provide fewer resources to invest in workplace health promotion. Also, the high fixed costs of implementing these programs may make them inefficient in smaller workplaces.

The economics of smaller workplaces often include high employee turnover rates, which may diminish an employer's interest in preventing chronic diseases (40). For example, in one study, restaurant owners described their employees as likely to move on to another job in one year, so investing in workplace health-promotion programs designed to prevent cancer or other chronic diseases made little sense to them (30). These employers were more receptive to offering a brief intervention to increase influenza vaccination, perhaps because influenza among employees had an immediate impact on operations.

#### **Readiness Challenges**

Readiness reflects the beliefs of individual decision makers within smaller workplaces about whether health promotion is appropriate, would benefit them, and would be feasible to implement (78). Smaller employers report that they do not see employees' health behavior as their appropriate responsibility (20, 47) and are reluctant to appear to be meddling or telling employees what to do outside of their jobs (30, 60). Most smaller employers who do not offer workplace health promotion are not convinced that it would benefit their bottom line (76). Because most evidence for the effectiveness of workplace health promotion is based on studies of large employers (54, 60), smaller employers may not be convinced of the effectiveness of these programs in their workplaces. Also, nearly half of smaller employers report a lack of interest among their employees, and more than half lack confidence in their ability to help employees manage their health (76). In a recent national survey of smaller employers (defined as fewer than 5,000 employees) in low-wage industries, even when employers agreed that workplace health-promotion programs might benefit them, they were less likely to agree that implementation of workplace health-promotion programs was feasible (29).

## **Capacity Challenges**

Capacity relates to the workplace as an organization and the presence or absence of resources to support workplace health promotion. Many smaller employers have limited internal capacity to implement workplace health promotion (49). In a recent national survey, most smaller employers in low-wage industries said they did not have a workplace health-promotion budget, a dedicated staff person, or a wellness committee (29), resources that are strongly associated with the presence of workplace health-promotion programs (29, 46).

Because of their limited internal capacity, smaller employers often rely on vendors and health insurance for workplace health-promotion programs, but these sources have their own limitations. In a recent qualitative study of vendors of workplace health-promotion programs, most preferred to work with large employers (J.R. Harris, K.R. Hammerback, P.A. Hannon, J. McDowell, A. Katzman, submitted manuscript, "Group Purchasing of Workplace Health Promotion Services for Small Employers"). Health insurance is the primary provider of workplace health-promotion programs for workplaces of all sizes (26, 49). Smaller employers face two limitations for insurance-based workplace health promotion. First, health insurance has limited reach among smaller employers and their employees. Among private-sector employers in 2012, only 22% of those with fewer than 10 employees offered health insurance, as did 58% of those with 10–24 employees, 76% of those with 25–99 employees, and 94% of those with 100–999 employees (74). In those

workplaces offering health insurance, about 60% of the employees were actually enrolled in the health-insurance plan (74). Second, many smaller employers that can offer insurance-based workplace health promotion do not have comprehensive programs; they are most likely to offer awareness-level materials such as web-based resources and newsletters (39).

Smaller employers also face logistical challenges to adopting and implementing workplace health promotion. These include employees spread across multiple worksites, employees without access to computers at work, and employees with limited English proficiency. These challenges are not unique to smaller employers but may be especially challenging for them, given their limited workplace health-promotion capacity.

# THE EFFECTIVENESS OF HEALTH-PROMOTION PROGRAMS IN SMALLER WORKPLACES

Workplace health-promotion research and practice originally focused on developing effective programs to increase individual behaviors, such as smoking cessation and physical activity, aimed at chronic disease prevention (17). Recently, research and practice have broadened to include health-promotion programs that simultaneously address occupational health and safety (66). Once effective programs are developed, dissemination and implementation research aids in scale-up and measures organization-level outcomes. This section, which reviews primarily US studies, first addresses methodological considerations in workplace health-promotion research, then reviews successful approaches to health promotion, including integrated approaches to promotion and protection, then finally reviews dissemination and implementation aimed at scale-up. We highlight research in smaller workplaces whenever possible; however, most research is confined to large workplaces or does not specify the size of the workplaces studied.

## Methodological Considerations in Workplace Health-Promotion Research

Research in workplace health promotion employs a wide range of study designs, including many studies using single-group, prepost designs in which only volunteers receive the program. Without a comparison group of similar people, any changes observed may be partly due to the characteristics of those who volunteer to participate (22). A recent review of research on workplace health promotion (66), including that in smaller workplaces, promoted using rigorous study designs, with a defined population, defined objectives, and a formal evaluation plan (18, 26, 66). We present research in this section from systematic reviews and individual studies that used rigorous designs.

Most early research involved large workplaces and randomized programs at the level of individual employees within a workplace (22). Some studies in smaller workplaces still use individual randomization (2, 65); however, many recent studies use group-randomized designs, using worksites or entire workplaces as the unit of randomization and analysis. In part, this change results from the introduction of community-organization principles into workplace health promotion (15) and employers' preference that any program offered as part of a research project be available to all employees. The Working Well trial is an example

of a group-randomized trial of smaller workplaces that showed sustained behavior change among employees (1, 12, 70, 69).

# Successful Programs Focused on Health Promotion Alone

We define successful workplace health-promotion programs as those that improve one or more employee health behaviors over a sustained period of time (12 months minimum). To have meaningful impact on the health of a workplace's employee population, the program needs to reach a large proportion of employees. To have sustained impact, the program needs to address both the formal policies of the workplace and the social norms of employees (11, 32, 66, 67). Such programs may have an additional positive impact on employers' costs by reducing absenteeism and lowering medical costs (6, 26).

Several recent reviews conclude that workplace health-promotion programs improve employees' health behaviors (3, 18, 50, 66). However, the size of the workplaces in the reviewed studies is not always specified. Where workplace size is stated, most of the included studies focus on large workplaces (50). Whether these findings generalize to smaller workplaces is not known (4).

We built on these reviews by searching for group-or cluster-randomized-design studies conducted in smaller workplaces and published since 2008 (Table 2). We found six studies that targeted eating, physical activity, and/or body weight (10, 11, 24, 44, 55, 60). The workplaces' industries were largely low-wage, by design. The duration of follow-up for all was at least 18 months, and for one study was 5 years. All but one study found an effect on eating, physical activity, or body weight, although some of the changes were confined to subgroups. These findings provide some evidence that workplace health promotion can be successful in smaller workplaces. The conclusions we can draw about smaller workplaces are limited by the fact that few studies met our criteria, and several of the outcome measures were self-reported.

In consideration of the prior reviews and the additional studies in smaller workplaces described above, we find that successful programs often have the following characteristics: They are based on an explicit theoretical model and strategies based on behavior-change principles (22, 66), they operate at multiple levels in the socioecological model (Figure 1), and they are tailored to a workplace's culture and constraints. Successful programs also often include incentives and competitions to engage and motivate employees (43) as well as a long-term engagement with the workplace to support program delivery and sustainability (55).

Given the challenges that employers and researchers face in applying health promotion to smaller workplaces, they may have reservations about implementing complex programs with all the characteristics we describe here. One potentially promising avenue is integrating workplace health promotion with activities that are already required, such as employee safety and health protection.

# Successful Programs that Integrate Health Promotion and Health Protection

Employee safety and health-protection programs use organizational and environmental strategies to minimize employees' exposures to job-related risks (e.g., physical, ergonomic, and psychosocial hazards) (45). The Occupational Safety and Health Administration (OSHA) mandates many health and safety standards that require employers to institute health-protection programs in their workplaces; states may have additional requirements (http://www.osha.gov/about.html). Such programs reduce work-related exposures and illnesses (72). Both workplace health-promotion and health-protection programs can improve employee health; however, they often operate separately from one another. New research evaluates programs that integrate workplace health promotion and health protection (38, 56, 63). Growing evidence supports the ability of integrated programs to increase employee participation in health-promotion (37) and health-protection programs (42), improve health behaviors (64, 68) and working conditions, and reduce occupational injury rates and perhaps costs (25). On the basis of emerging evidence, many organizations support these integrated approaches, including the Institute of Medicine (19), the American College of Occupational and Environmental Medicine (38), the National Institute for Occupational Safety and Health (56), and the American Heart Association (16).

To date, much of the evidence on integrated programs comes from large manufacturing settings; we review here the limited evidence from smaller workplaces. We focus on peer-reviewed research evaluating integrated programs conducted in smaller workplaces and containing three components related to the socioecological framework: (a) strategically coordinated worksite health-promotion and health-protection functions, (b) multiple levels of influence (individual, interpersonal, and organizational levels), and (c) communications to employees linking workplace health promotion and health protection through messages conveying interactions between health behaviors and job experiences and exposures (38, 19, 51, 66).

We identified one randomized trial that tested an integrated program in smaller manufacturing businesses employing multiethnic workforces (36, 64). The study promoted changes in diet, physical activity, and multivitamin intake within the context of a program that also protected against hazardous job exposures (64). Compared with the minimal-program group, employees who received the integrated program reported significantly higher levels of physical activity and multivitamin use. Additionally, employee participation was exceptionally high (36).

#### **Successful Programs Administered Through Labor Unions**

Although they are not really workplace based, union-based programs merit inclusion here because they provide an example of off-site workplace programs that may be particularly suited to the smallest workplaces and to mobile workforces. Unions provide social support networks and infrastructures (e.g., union halls, communication vehicles, and training programs) through which they can deliver messages to members who may work in smaller workplaces (7, 58). Blue-collar union members are often exposed to workplace hazards and risks (e.g., smoking) that make integrated programs particularly salient for them (8). Studies have been conducted with union-sponsored programs for construction and motor-freight

employees (7, 58, 59, 67). Researchers reported significantly higher smoking quit rates among training-program participants than among nonparticipants (7, 58). Studies testing telephone-delivered programs reported positive results in reducing smoking (59, 65) and increasing fruit and vegetable consumption (65) but not in weight management (67). These studies highlight limitations of on-site programs; off-site programs may be better suited for transitory and mobile workforces.

In summary, the few studies that integrate health-promotion and health-protection programs in smaller workplaces were in the manufacturing, construction, and transportation sectors. As in larger workplaces (68), evidence suggests the most consistent positive effects in tobacco cessation, though other health behaviors were impacted favorably. High participation rates in projects using integrated programs are encouraging; these programs may reach high-risk employees who might view their participation in traditional wellness programs as futile while they are exposed to significant occupational exposures (36, 66).

#### Dissemination and Implementation Research Aimed at Scale-Up

In the studies we have discussed so far, the main outcomes were individual-level health behavior changes (10). An emerging body of research focuses on outcomes of workplace-level changes to communications, environment, policies, and programs (akin to supportive environment changes in O'Donnell's framework). These studies usually take evidence-based practices or programs and design approaches to encourage employers to adopt and implement them. For example, researchers working with the American Cancer Society created a program, Workplace Solutions, to provide employers with evidence-based practices from the Guide to Community Preventive Services (http:// www.thecommunityguide.org/). The main outcome of these studies was the proportion of practices implemented at baseline and follow-up. An initial pilot study of Workplace Solutions with eight large employers showed significant improvements in implementation one year after the intervention (34). However, when Workplace Solutions was tested in a randomized controlled trial with smaller employers, it was not effective in increasing overall implementation, though policies and communications did improve (31). A modified version of Workplace Solutions, which provided more on-site assistance and technical support, was pilot-tested with smaller employers and showed significant improvements in implementation (41); it will soon be tested with a randomized controlled trial.

## **NEXT STEPS FOR RESEARCH AND POLICY**

As discussed above, smaller workplaces make up the vast majority of US workplaces and employ half of US employees. Their employees are often low-wage earners and are therefore at increased risk for chronic diseases; however, smaller workplaces face challenges that make them less likely to offer on-site workplace health-promotion programs and less likely to offer health insurance, which is currently the major vehicle for off-site health-promotion services. The programs they do offer, whether aimed at health promotion alone or integrated with health protection, are rarely comprehensive and are understudied. This limitation is especially true for the smallest workplaces with less than 20 employees, which comprise 90% of US workplaces; we found almost no research on workplaces of this size. What

research can be prioritized to help us overcome identified barriers to adoption of health promotion for employees of smaller workplaces and to improve its implementation and sustainability? What will be the impact of the Affordable Care Act on smaller employers, and which other policies are needed to enhance health promotion for their employees?

#### **Research Priorities**

One priority is to improve the process by which research is undertaken. Community-based participatory research engages directly with employers, insurers, and employees, thus identifying questions of mutual interest and pragmatic value to smaller workplaces. A second priority is to improve the timing and pace of research efforts. Typical research timetables may be too long for testing new or innovative programs that employers want to implement. A third priority is to consider the full range of research designs and analytic techniques that will help answer priority research questions in a less costly, less time-consuming, but highly rigorous manner. For example, natural experiments, mixed methods, interrupted-time-series analyses, and simulation modeling can answer important policy and program questions with less demand on any given workplace. A fourth priority is to improve individual and organizational outcome measures for smaller workplaces. Data from smaller workplaces (even when aggregated) run the risk of identifying and breaching the privacy of individual employees with special disease conditions. Very few organizationlevel measures have been tested with smaller employers, though the Centers for Disease Control and Prevention (CDC)-funded National Healthy Worksite Program is currently investigating one such measure, the CDC ScoreCard. Smaller businesses are likely to be cost-conscious; most of the studies cited in this review did not report costs associated with their interventions. Baicker et al. (6) found that employers spent about \$150 per employee per year on wellness programs, which generated significant return on investment. Many smaller employers might find this figure prohibitive; it would be valuable to learn whether research-tested interventions for smaller employers have lower, comparable, or higher costs.

A fifth research priority is identifying, adapting, and implementing evidence-based workplace health-promotion programs for smaller workplaces. Understanding the nuances of working within different industries (retail versus manufacturing, for example) is critically important for increasing initial and long-term program success. Even more important is the need to develop approaches that are feasible and scalable for the 5 million US workplaces with fewer than 20 employees. Perhaps the union-based off-site models can be adapted and expanded to nonunion workplaces. Similarly, health-insurance companies could research the reach and effectiveness of both their on-site and their off-site offerings.

#### **Policy Needs**

The Affordable Care Act has the potential to increase health promotion among employees of smaller workplaces in four ways. First, the Act has already expanded access to clinical preventive services, such as immunizations and screening tests, by mandating their coverage and eliminating copays and coinsurance (62). Second, the Act will dramatically expand health-insurance coverage for employees in smaller workplaces by expanding Medicaid, by offering premium-assistance subsidies to employers of low-wage employees (13), and by providing subsidies to low-wage adults to enable them to buy insurance via the health-

insurance exchanges. To the extent that Medicaid and the insurance-exchange plans offer their beneficiaries effective services for improving lifestyle behaviors, access to health promotion will increase. Third, the Act provides an incentive for preventive lifestyles by increasing the reward that employers may offer to employees under a health-contingent wellness program linked to a health-insurance plan (21). Fourth, the Act authorizes grants for eligible employers with fewer than 100 employees to offer comprehensive workplace health-promotion programs (Section 10408), but no funds have been appropriated.

State-level policy efforts also encourage smaller employers to invest in comprehensive workplace health-promotion programs. For example, the Massachusetts Department of Public Health is writing regulations that would provide tax credits to smaller businesses that implement wellness programs (5). North Carolina adopted legislation [NC Gen. Stat. § 126–4 (2008)] requiring that all state organizations identify a wellness leader, establish a wellness committee, and plan and implement evidence-based health-promotion efforts. Unfortunately, this policy mandate did not include funding, and initial enthusiasm has waned.

A final recommendation is continued monitoring and evaluation in such a changing health care landscape. The Affordable Care Act could have unintended consequences, and only ongoing monitoring and evaluation at national and state levels can identify the balance between positive and negative effects and offer timely recommendations on any needed course corrections.

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#### **DISCLOSURE STATEMENT**

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

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#### **SUMMARY POINTS**

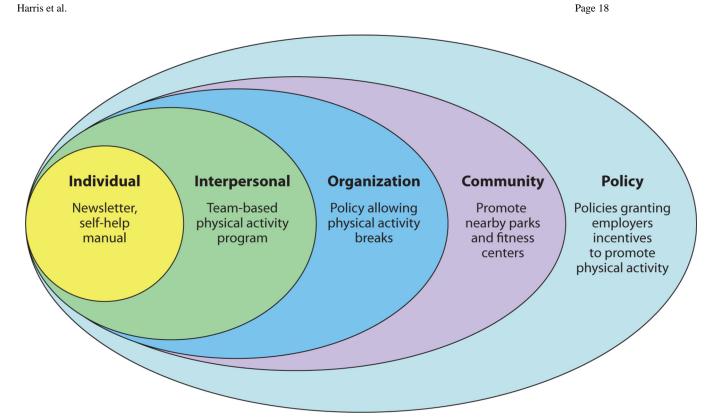
1. Smaller workplaces (with less than 1,000 employees) constitute the vast majority of US workplaces and employ half of working US adults.

- 2. The employees of smaller workplaces are more likely than employees of larger workplaces to be low-wage earners and are at increased risk for chronic diseases.
- **3.** Smaller workplaces are less likely than larger workplaces to offer workplace health-promotion programs.
- 4. The challenges smaller workplaces face in offering workplace health-promotion programs include having few vendors to serve them and low commitment to, and internal capacity for, program delivery.
- **5.** Smaller workplaces are also unlikely to offer health insurance, which is a major vehicle for offering health-promotion services.
- **6.** Some health-promotion interventions in smaller workplaces have been effective in changing behavior, but more research is needed.
- **7.** A promising model for smaller workplaces integrates health promotion with health protection.
- **8.** The workplace health-promotion programs smaller employers do offer, whether aimed at health promotion alone or integrated with health protection, are rarely comprehensive and are understudied

#### **FUTURE ISSUES**

1. Research priorities for health promotion in smaller workplaces include (a) making the research more participatory, (b) shortening the timelines to producing usable results, (c) using less costly, less time-consuming, yet rigorous research designs and analytic techniques, (d) improving individual-and organization-level outcome measures, and (e) developing industry-tailored programs as well as programs feasible for the smallest workplaces.

- 2. The Affordable Care Act has the potential to increase health promotion among employees of smaller workplaces by (a) mandating preventive care as part of health insurance, (b) expanding health-insurance coverage, (c) offering employees financial incentives to participate in health-contingent wellness programs linked to health insurance, and (d) providing grants to smaller employers for comprehensive workplace health-promotion programs.
- **3.** State and local governments should develop tax benefits, incentives, and other policies to encourage smaller employers to implement comprehensive workplace health-promotion programs.
- **4.** A system should be put in place to monitor and evaluate the health and health behaviors of employees of smaller workplaces and to connect them with health-promotion services.



**Figure 1.** Socioecological framework and workplace physical activity interventions.

Table 1

Among workplaces offering health benefits, percentage offering a particular wellness program, by workplace size, 2012 (39)

	Workplace size (number of employees)				
Wellness offering	3–24	25–199	200–999	1,000-4,999	5,000
Offered at least one specified wellness program <sup>a</sup>	58%	79%	93%	96%	99%
Behavioral or lifestyle coaching	16%	37%	54%	65%	73%
Biometrics	10%	23%	45%	60%	61%
Classes in nutrition/healthy living	19%	35%	52%	61%	68%
Gym membership discounts or on-site exercise facilities	22%	48%	61%	78%	85%
Smoking cessation program	23%	48%	68%	76%	84%
Web-based resources for healthy living		58%	75%	85%	90%
Weight-loss programs	21%	42%	62%	78%	78%
Wellness newsletter	42%	53%	62%	62%	65%

<sup>&</sup>lt;sup>a</sup>Specified wellness programs include those in the table, employee assistance programs, and flu shots.

 $\label{eq:Table 2} \textbf{Recent studies on health promotion in smaller workplaces}^a$ 

	Company type	Design type	Intervention focus	Evaluation	Measures	Main findings	
Seattle 5 a Day B (11)	Blue collar workplaces	Group randomized	F&V consumption	2-year follow- up; 5-year follow-up		Change in daily F&V at 2 years diminished over time but remained significant at 5 years	
Step Ahead (44)	Hospitals	Cluster randomized	Prevent weight gain	1- and 2-year follow-up	BMI, perceptions of organizational commitment	No change in BMI. Improved perceptions of commitment to employee health	
3W (55)	Hotels	Group randomized	Obesity prevention	1- and 2-year follow-up	BMI, absenteeism	Change in BMI in selected subgroups only	
French (24)	Bus garages	Group randomized	Obesity prevention	18-month follow-up	BMI, physical activity, energy intake, F&V intake	Change in energy intake and F&V intake only	
PACE (10)	Manufacturing, transportation, and service	Group randomized	Prevent weight gain	2-year follow-up	BMI, waist circumference	Change in walking frequency in select subgroups only. Change in information environment	
Obesity prevention (61)	Schools	Group randomized	Health- promoting interventions identified by wellness committees	2-year follow-up	BMI, waist-hip ratio, physical activity, F&V intake	Change in BMI only	

<sup>&</sup>lt;sup>a</sup>Abbreviations: BMI, body mass index; F&V, fruit and vegetable.