



Total Worker Health®

Approaches in Small- to Medium-Sized Enterprises

Lee S. Newman and Liliana Tenney

This chapter focuses on the unique needs and challenges facing small and medium enterprises (SMEs) and their employees in addressing occupational health, safety, and well-being. In 2013, 56.8 million U.S. workers representing 48% of the total workforce were employed by *small businesses*, defined by the U.S. Small Business Administration as having fewer than 500 employees, and with the vast majority (98%) having fewer than 100 employees. Small enterprises employ a disproportionate number of workers in every high-risk industry sector, including accommodation and food services, wholesale trade, construction, agriculture, forestry, fishing, and transportation. These workers bear a greater burden of occupational fatalities, illnesses, and injuries (Sinclair, Cunningham, & Schulte, 2013). They also have comparable and sometimes higher than average rates of chronic health conditions and unhealthy behaviors (Newman et al., 2015; Schwatka et al., 2017). Unfortunately, SMEs generally do not offer the same level of health protection, health promotion, employee benefits, and wages found in larger enterprises (Anger et al., 2015; McCoy, Stinson, Scott, Tenney, & Newman, 2014; Pronk, 2013). Research has confirmed that there is low adherence to traditional occupational safety and health best practices by small companies as well as a low degree of adoption of work organization/benefits best practices and health promotion programs (Linnan et al., 2008) despite the observation that 93% of surveyed small business owners have reported that their employees' health is important to their

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bottom line (National Small Business Association, 2012). Our research affirms the link between workers' chronic health conditions, past work-related injuries, and SME productivity (Jinnett, Schwatka, Tenney, Brockbank, & Newman, 2017), yet SME engagement in preventive policies, programs, and practices remains low (Sinclair et al., 2013).

From an integrated *Total Worker Health*[®] perspective, our understanding of the barriers to adoption and the effectiveness and sustainability of *Total Worker Health* (TWH) programs in small business is extremely limited (Bradley, Grossman, Hubbard, Ortega, & Curry, 2016; Feltner et al., 2016; Institute of Medicine, 2014). Most TWH intervention studies have been conducted in large enterprises and offer little evidence to support the generalization of results to the small business setting (Institute of Medicine, 2014). This chapter summarizes the relevant research and provides examples from research and practice experience in designing and testing SME interventions conducted at the Center for Health, Work & Environment at the Colorado School of Public Health. The authors use Health Links, a signature program of the center that they cofounded and oversee, to provide case studies that illustrate how research can inform practice and suggest a systematic approach to developing sustainable, scalable TWH solutions in SMEs. This chapter aims to help describe the specialty of "the TWH practitioner" as the person who can assess, design, and implement TWH strategies that meet the needs of the workplace and individual workers. In addition, the chapter identifies areas for future research to address the substantial gaps in knowledge of what works in SMEs.

LOOKING BEYOND THE NUMBERS

The challenge of understanding the needs and solutions for SMEs starts with an examination of what SMEs are and how they may differ from large enterprises. Even the way that we have defined small business—as fewer than 500 employees—ignores the wide range of business size within that group (i.e., from fewer than 50 to fewer than 100 employees) that may attribute to differences in the way the TWH program is implemented. As Cunningham, Sinclair, and Schulte (2014) pointed out, imprecision in the definition of small business and an overreliance on employee number to define an SME interfere with our ability to understand how to foster meaningful improvements in occupational safety, health, and well-being. The current work of the National Institute for Occupational Safety and Health (NIOSH) small business assistance and outreach program (Cunningham et al., 2014; Sinclair et al., 2013) highlights that although company size and annual revenue are convenient metrics, they set arbitrary cutoffs that may miss the importance of contextual factors. As discussed in the case studies that follow, the context in which a business operates is probably even more important in SMEs than for larger organizations, which are better resourced and more self-sufficient. Several lines of evidence have suggested that contextual factors influence well-being and the effectiveness of

workplace interventions that seek to improve worker well-being and traditional workplace safety (Harris, Hannon, Beresford, Linnan, & McLellan, 2014). Smaller businesses may require greater assistance from external organizations, such as government, insurance agencies, chambers of commerce, peers, and other businesses in their community to address occupational safety and health regulations, to gain access to consultation services and technical assistance, and to find social support and recognition for improving practices (Harris et al., 2014; Hasle & Limborg, 2006; Sinclair et al., 2013).

Characteristics that need to be considered include business structure; age maturity of the enterprise; organization of work; wages; provision of employee benefits, including health care; characteristics of the workforce, including reliance on seasonal, part-time, and/or subcontract workers; management and leadership; social environment or culture of the organization; access to financial and other resources; and support in the business community, including intermediary organizations (Cunningham et al., 2014; Harris et al., 2014). Unfortunately, remarkably few studies have identified or examined these and other contextual factors affecting our understanding of SMEs (Feltner et al., 2016). From a practical standpoint, it has been our observation that the multibillion-dollar, for-profit health promotion industry typically has ignored SMEs or has approached implementation in SMEs with scaled-down versions of services developed for larger firms. There is little evidence suggesting that “small businesses are just little big businesses” (Institute of Medicine, 2014, p. 37). And, in our experience, a scaled-down big business approach fails to capitalize on some of the unique strengths of SMEs, which we discuss later.

BARRIERS AND FACILITATORS TO ADOPTION

Although these lines of reasoning would seem to suggest that SMEs would be ready to see the potential benefits and advance an agenda of workplace safety, health, and well-being, uptake has been poor (Linnan et al., 2008; McCoy et al., 2014; National Small Business Association, 2012). This result led us to start critically examining some of the obstacles, especially those related to adoption of interventions as suggested by the work of Glasgow, Vogt, and Boles (1999), who defined *adoption* as the “proportion and representativeness” of settings (p. 1323), such as the workplace that adopts a policy or program. In a 2014 systematic review of research examining the barriers to adoption of worksite wellness programs by SMEs (McCoy et al., 2014), we found only one rigorously designed study. In 2008, 24% of large U.S. businesses offered all elements of a comprehensive program as defined by HealthyPeople 2020 (Office of Disease Prevention and Health Promotion, n.d.), whereas only 4.6% of small worksites offered those components (Linnan et al., 2008). Linnan et al. (2008) identified major barriers, including lack of employee interest, lack of staff resources, limited funding, low participation on the part of high-risk employees, and lack of management support. This research literature continues

to be populated by qualitative, descriptive studies of low rigor that have suggested a laundry list of potential barriers, including direct costs, lack of facility space to carry out programs, perceived lack of expertise, high cost of third-party services, lack of local service providers, low likelihood of return on investment (ROI), concern about employee privacy, and concern that management seems paternalistic (McCoy et al., 2014).

Since the time of this review, several new studies have been published and provide additional insights. In a study of 218 Australian worksites with fewer than 20 employees, Taylor, Pilkington, Montgomerie, and Feist (2016) found that smaller employers that embraced health promotion ranked employee morale and work-life balance as the most important reason for providing programs, whereas larger businesses emphasized work-related injury prevention. In a survey of human resources managers in 117 U.S. businesses with fewer than 750 employees, McLellan et al. (2015) observed that top leadership support proved important for occupational safety and health policies and programs, but having accompanying resources, such as dedicated budgets, staff, and standing committees, were even more strongly related to implementation, especially for worksite health promotion. Williams et al. (2015) conducted a web-based survey of human resources managers in small to medium employers (fewer than 750 employees) and provided descriptive evidence that even in SMEs that have embraced health promotion, many fall short in organizational leadership and commitment, coordination between health protection and promotion, processes for training and accountability, coordination of management and employee engagement strategies, use of incentives and benefits, integrated evaluation and surveillance, and development of comprehensive program content. In our longitudinal study of 260 small businesses that adopted a health promotion program (Newman et al., 2015), employers reported lack of program expertise, uncertain ROI, and privacy concerns as leading reasons for reticence.

From an integrated TWH perspective, the barriers to adoption and the effectiveness and sustainability of the TWH program in SMEs remain poorly understood. In addition, few of the published TWH interventions use models of organizational change management or other theoretical frameworks, thus limiting understanding of how to effect change, generalize, scale, and maintain TWH solutions (Anger et al., 2015; Bradley et al., 2016). For example, factors important for transformational change, such as organizational safety climate and health climate, are moderators in the adoption of workplace safety and health practices; however, little is known about the role of climate in SMEs (Clarke, 2010; Cunningham et al., 2014).

UNIQUE OPPORTUNITIES FOR HIGH IMPACT

The introduction of interventions in small workplaces is a unique opportunity to have a high impact on worker safety and health because of high burden and high need. Consider the public health case for addressing health protection

and other prevention efforts that advance the safety, health, and well-being of workers in SMEs. With nearly 6 million small workplaces employing more than half of the nation's private sector employees, according to the U.S. Census Bureau (n.d.), any interventions that prove to be scalable will have potential to reach and impact large numbers of individuals, including many lower wage employees who are at increased risk for chronic diseases as well as for occupational illnesses, injuries, and fatalities.

However, this public health message is unlikely to resonate with small business owners and operators. What is needed is a better appreciation of what the value proposition is from the small business owner's perspective. The opportunity lies in finding that message and marketing it effectively as a business opportunity—a subject that has received little attention from the academic community—to hone the right message and get it across in a way that resonates with business leaders.

In the examples that follow, when interventions succeed, it is in part because SMEs have been offered a clear and compelling rationale that helps them understand why it is good for their business. That message may be shaped around ROI or, more often, around the *value* on investment (VOI) specific to the motivations driven by personal moral convictions rather than business drivers. Although much more needs to be done to research the messaging that works best, qualitatively, business owners have reported that they want happier, healthier, more productive employees, and that they want to be able to compete for the best recruits when they are hiring (National Small Business Association, 2012). They are seeking ways of reducing absenteeism and of reducing presenteeism. Consistent with this line of thought, in our recently published study of the relationship between workplace safety and chronic conditions in SME employees, we observed substantial impacts on productivity in terms of absenteeism and presenteeism (Jinnett et al., 2017). The absence or loss of even a single employee can produce substantial operational, cultural, and financial consequences.

To understand how to best reach SMEs, it is necessary to first identify and understand one's target audience. Interventions and SME engagement are most successful when SME leadership possesses a higher degree of health and safety literacy, understands how the workplace can impact worker health and safety, and is both committed and visible in leading the TWH program. Thus, leadership engagement in fostering TWH programs presents an opportunity in SMEs where the majority of firms are owner managed and where investment and control lie with the same person. Whereas larger organizations may be more likely to consult with specialists, such as organizational/industrial psychologists and other occupational health and safety professionals, SMEs more realistically need to become TWH generalists to serve their own organizations. Facets of the organization that appear to contribute to success include companies that show a high degree of cross-department collaboration, have close-knit employees, and show a greater sense of culture and connectedness between management and employees. Communication that comes from

respected community members, peers, and customers is particularly powerful. SMEs are accustomed to establishing collaborative relationships with external vendors, insurance agents and insurers, local chambers of commerce, and existing public health infrastructure (McPeck, Ryan, & Chapman, 2009), suggesting an untapped opportunity for achieving potentially greater reach and impact than might be achievable in large business and is in keeping with the socio-ecological framework (Harris et al., 2014). Examples of successful interventions that consider SME in situ follow.

In an interesting analysis of the challenges and opportunities, Harris et al. (2014) suggested that inroads will be made in smaller workplaces if TWH practitioners gain a better understanding of the small enterprise's context, readiness, and capacity. They also suggested that one must consider contextual challenges, including economics (e.g., low profit-margins) and high employee turnover rates (that may dampen the enthusiasm for underwriting health promotion for chronic illnesses but raise enthusiasm for short-term benefits like influenza vaccinations and injury prevention). The researchers described the *readiness challenge*, meaning that the beliefs of individual decision makers regarding the relevance and feasibility of such programs impact adoption. In addition, they suggested that because SMEs have limited internal capacity to implement programs, they need help in identifying TWH issues and addressing logistical challenges. Our own research across a wide range of industries has shown that when these barriers are mitigated, smaller enterprises are eager to engage (Newman et al., 2015; Schwatka et al., 2017).

Extrinsic motivators that help drive SMEs to invest in worker health, safety, and well-being also have been attributed to businesses' interest in addressing their environment and social impacts. All businesses, large and small, have come under increasing pressure to engage in corporate social responsibility (CSR). Businesses are driven by the desire to be sustainable, have a more engaged workforce, build relationships, attract new customers, and increase profits (Vives, 2006). Businesses focused on CSR redefine success by building company values that prioritize a triple bottom line that measures company performance on people, planet, and profits (Jenkins, 2009). SMEs are well positioned to not only contribute to significant community impact through CSR and TWH practices but align the two for creating better business systems that lead to benefits, such as greater competitive advantage (Jenkins, 2009). The next section provides a framework to engage businesses and proposes ways to overcome many of the unique challenges SMEs face. The section also illustrates ways in which SMEs are well positioned to take advantage of the TWH approach.

HOW TO ENGAGE SMALL- AND MEDIUM-SIZED ENTERPRISES USING A TOTAL WORKER HEALTH FRAMEWORK

Conventional approaches to engaging businesses to adopt and implement health promotion and health protection have been based on a one-size-fits-all model adapted from what has worked in large businesses (Newman et al.,

2015). The TWH program is recognized as a useful approach to improving worker safety, health, and well-being in the work environment. However, the question of how best to command the attention of SMEs, how to assess their TWH practices, and how to disseminate the evidence to them effectively often leaves both researchers and practitioners puzzled. Anger et al. (2015) published a literature review to identify the effectiveness of TWH interventions and concluded that there is a need to learn how to improve dissemination of best practices. In 2003, Schulte et al. identified special dissemination challenges: a need for information among a changing workforce, new and young workers, small businesses, and workers with difficulty in understanding or reading English. Sinclair et al. (2013) used the diffusion of innovation model to incorporate intermediary organizations, such as trade associations, to reach small employers and found that there are opinion leader organizations and individual influences within intermediaries who are key to decisions and actions about occupational safety and health programming. As we aim to reach these decision makers, it is important to remember that the same motivational pressures that engage SMEs in TWH practices may not be the same for large companies.

Use Approachable Assessment Tools and Messaging

SMEs stand to benefit from a process that starts by measuring benchmarks through approachable assessment tools. Many tools have been developed to assess organizational activities for health promotion, safety, well-being, and integration. Businesses that are in various stages of readiness to change learn not only what they currently are doing right but where they can improve their impact. When these assessments are coupled and followed up with technical assistance that can be customized based on the needs of the unique business and its workforce, actionable recommendations and organizational-level changes occur (Pronk et al., 2016).

We have identified the importance of designing programs that are readily understood and that have a low barrier to adoption. In 2017, Thompson, Schwatka, Tenney, and Newman (2018) used qualitative methods involving a series of focus groups with SME decision makers and employees to understand how to improve TWH adoption, implementation, and messaging. Participants expressed the importance of assessment and benchmarking health and safety to identify tailored recommendations. When it came to the format of assessments, they expressed concern about the difficulty and challenges of completing extensive forms favored by academics. Some of the reasons they cited included the forms are too long, the information they asked for was not accessible to them, and the information requested required input from multiple people in their organization. They thought that networking through local chambers of commerce and business organizations, conference attendance and sponsorship, and social media (e.g., Facebook; blogs; local and national radio, such as National Public Radio; Google searches) were important and appropriate methods to get the TWH message out to businesses. They agreed that partnering

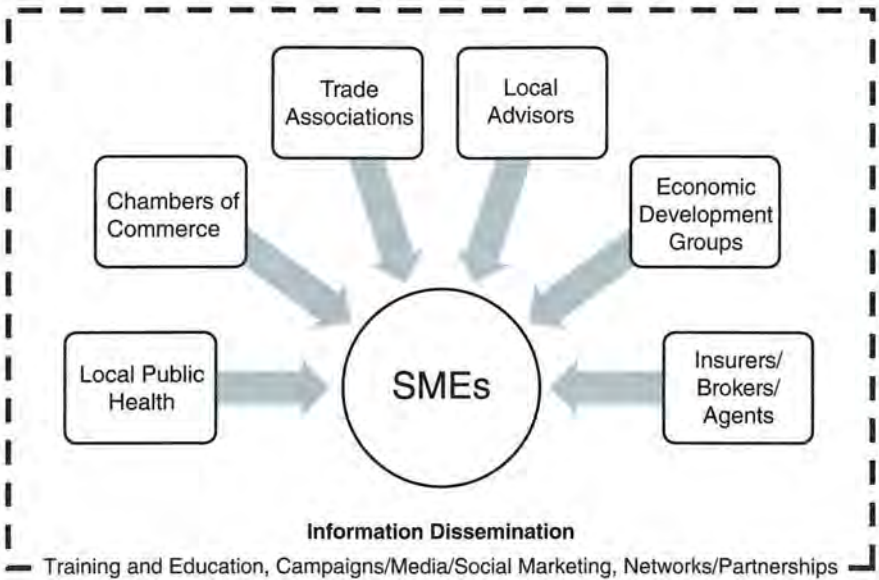
with insurance carriers, insurance agents, and other businesses that service SME provides a good way to foster SME engagement. Interestingly, in those focus groups, Thompson et al. (2018) found that people's perceptions of health, safety, and well-being often differ sometimes in substantial ways. In general, wellness and safety were viewed as distinct from one another, with *wellness* being defined as a benefit and *safety* perceived as a requirement. Interestingly, the major drivers that participants cited for investing time and money into TWH activities, such as employee benefits, safety programs, and health promotion activities, did not revolve around business threat or cost burden. SME owners expressed the importance of improving employee motivation, productivity, and overall happiness. The findings confirmed the importance of focusing on VOI versus ROI to motivate SMEs (Ozminkowski et al., 2016).

This formative research led us to develop strategies that had a defined target audience, used clear and concise messaging, were interactive, and used key metrics to evaluate intervention effectiveness. Our dissemination to SMEs was guided by the following three core principles: (a) increase TWH knowledge and practice through research translation, communication, and outreach; (b) build capacity for the TWH program in communities through training and education, and strategic partnerships; and (c) engage in activities aimed at increasing adoption and implementation of TWH best practices, policies, and programs with input from both employers and their employees.

Overall, engaging SMEs depends largely on how they receive the information and their stage of readiness to change (Cunningham et al., 2014). Practitioners may benefit from a mixed methods approach to develop key messaging for the business opportunity for SMEs; articulating clear calls to action—that is, simple steps toward adopting and implementing the TWH program—and designing and implementing strategies to incorporate TWH training, communications, and programs into existing business programs. These strategies are based on understanding key factors, including the organizational structure, characteristics of the business, organization of work itself, and other contextual elements that are essential in defining the target audience: *what* employers and *who* from the organization you should be talking to. In addition, developing a strategic outreach and marketing plan should consider industry, size, geographic location, and workforce demographics.

Build Capacity Through Local Partnerships

Local community coalitions are starting to form across the country and are catalyzing around the concepts of the TWH approach and fostering “healthy businesses.” In our community-based work, we have found ourselves both observing and helping to foster a supportive social context for change. These groups, as illustrated in Figure 9.1, include business organizations, offices of economic development, chambers of commerce, county public health, health care organizations, and safety and health promotion professionals, and our local TWH trainers. The following questions can help local coalitions and

FIGURE 9.1. Partnership Model for Engaging Small and Medium Enterprises (SMEs)

community groups to set goals for SME engagement with their local target audiences, increase reach, and promote broader commitment in the business community around health and safety:

- What words will make sense to, and resonate with, SMEs? Researchers and TWH practitioners frequently use terms that are jargon to anyone outside of the field, such as “total worker health,” “health promotion,” “health protection,” “dissemination,” and “needs assessment.” Break through the language barrier.
- How can you build and coordinate regional and local capacity to deliver TWH information, education, and training that is relevant to the needs of SMEs? Employers favor local, in-person advising and information exchange.
- How can you provide TWH trainings and education for owners, managers, and employees in SMEs?
- How can you communicate effectively through website content, social media, success stories, media and channel partners, and stakeholder groups?
- How can you coordinate and collaborate across partners to disseminate best practices, benefits, and case studies to SME influencers, managers, and employees?
- How can you apply innovative dissemination approaches to provide science-based TWH information that will reach a geographically dispersed audience, especially when the workforce may include precarious workers?

- How can you create culturally and context-sensitive approaches for applying the TWH approach?
- How will you monitor and evaluate your goals and objectives on an ongoing basis?

Groups that have established relationships with SMEs, such as insurance brokers, can succeed by incorporating TWH messaging into service lines, benefit packages, and existing communications (Sinclair et al., 2013). For early stage or struggling small employers, it is critical to find ways to leverage these channels so that the TWH program is not adding to information clutter or being construed as a distraction from more urgent business priorities. The Health Links model, described in the next section, works closely with both community-level and employer-level stakeholder groups to improve health, safety, and well-being.

THE HEALTH LINKS MODEL

In 2012, we developed Health Links, a TWH intervention for small business (Schwatka et al., 2018). The program was designed by conducting focus groups and key informant interviews with business leaders, small business owners, managers, employees, chambers of commerce, insurers, brokers, offices of economic development, marketing and advertising consultants, public health officials, experts from occupational health and safety, health promotion practitioners, NIOSH Centers of Excellence for *Total Worker Health*, and other stakeholders. We determined that the intervention must (a) be based on best available evidence, (b) accommodate the needs of many different types of small businesses and workforces, (c) be feasible for small businesses to access and adopt (e.g., inexpensive, not resource/time intensive), (d) be scalable, (e) apply basic principles of organizational change management, and (f) generate metrics so that the program could be evaluated in five domains using the RE-AIM model: reach, effectiveness, adoption, implementation, and maintenance of the intervention (Glasgow et al., 1999).

The result was the creation and launch of Health Links, a mentoring program that champions health and safety at work. The comprehensive certification and advising program uses evidence-based strategies to help organizations and their team members achieve total worker health. A cornerstone of the intervention is the Health Links healthy business certification that was developed by adapting constructs from Centers of Excellence for *Total Worker Health* (Harvard School of Public Health, Center for Work, Health, & Well-Being, 2012), the Centers for Disease Control (2016) Worksite Health ScoreCard, and the World Health Organization healthy workplace framework and model (Burton & World Health Organization, 2010). The Health Links team hired a professional advertising firm to help create an intuitive, professional-grade website with a look and feel that would appeal to businesses. The website hosts an online

assessment tool that is short, is written with as little jargon as possible, explains key terms, provides feedback, and collects data on key measures. Questions in the assessment were selected that would be relevant and generalizable to businesses in all sectors and of all sizes.

The assessment is an online questionnaire that measures an organization's health and safety culture based on six benchmarks: organizational supports, workplace assessments, health policies and programs, safety policies and programs, engagement, and evaluation. The assessment includes questions that map to major health and safety areas, from stress management to return-to-work programs. Results of the questionnaire were used to determine whether a business is recognized as a certified healthy business or as a *kick-start business* for organizations that are at early stages of adoption but aspire to become certified. Certified healthy businesses may fall into one of three certification levels: certified, partner, or leader.

On completion of the online Health Links assessment, employers are provided with a report card identifying areas in which they can improve across the benchmarks. Employers are then offered two on-site advising sessions conducted by a trained TWH advisor. The advisors, who are based in each geographic region, received training from members of the Health Links faculty and staff. The local advisor network was developed to scale reach and implementation and was based on feedback from businesses that the personal touch of having in-person, local, trusted technical assistance is important to SMEs. During the advising sessions, each advisor goes through the business's assessment and report card to collaborate with the business to target tailored evidence-based strategies and establish an action plan. Advisors remain available to provide ongoing follow-up to answer questions and support reassessment every year. To measure employer TWH activities, the online assessment and advising sessions evaluate how organizations are implementing TWH practices. Participation in Health Links qualifies businesses for both local and statewide recognition, opportunities to connect with local business–public health coalitions that have made the TWH program a regional priority, and local providers of services that can enhance the ability of a business to achieve its goals for improving safety, health, and well-being (Schwatka et al., 2018).

After 3 years of engaging businesses, the authors of this chapter observed a high level of interest from both rural and urban business communities. It's evident that Health Links also can result in a Trojan horse effect whereby businesses that start with more emphasis on one TWH element (e.g., "health promotion/wellness") subsequently adopt other elements that we introduce at the same time (e.g., safety policies, programs, practices). Preliminary data (Schwatka et al., 2018) have suggested that this intervention helps SMEs not only adopt TWH programming elements but also maintain these changes over the long term because these SMEs continue to engage with their local Health Links community and resources. Dissemination through local channel partners emphasizes the importance of such intermediary organizations to deliver and reinforce TWH interventions to small businesses, as has been reported in the literature (Sinclair et al., 2013).

As of 2016, the authors of this chapter have gained experience with more than 500 businesses through Health Links across a range of geographic locations, business sizes, and industries. Our preliminary data have suggested that although there seems to be an agreement between the quantity of health promotion and health protection activities (measured by number and type of policies and programs), there is significant variation. Some organizations may display predominantly more safety than health promotion behaviors or vice versa. We have observed that most certified businesses are starting the TWH program because they are interested in improving the health of their employees and their families, improving employee morale, enhancing productivity, and increasing employee retention. The majority of businesses have reported that their leadership (i.e., owner or managers) participates in TWH activities, has coordinated health and wellness activities with safety, and has promoted health and safety of off-site workers.

TOTAL WORKER HEALTH IN PRACTICE

In working with SMEs, Health Links has evaluated the short- and long-term outcomes related to goals set to help businesses adopt and implement TWH best practices. This process has largely been based on applying the RE-AIM framework (Glasgow et al., 1999), developed to translate research into practice, to help with dissemination and to help programs apply to real-world settings. The application of RE-AIM has ensured a consistent approach to focus on reach, effectiveness, adoption, implementation, and maintenance. Short-term outcomes have included (a) increased reach to small- and medium-sized businesses, and to underserved groups; (b) increased adoption and implementation of TWH best practices in SMEs; (c) increased knowledge, positive attitudes, and behaviors among employers around TWH best practices; (d) increased TWH capacity at the local level; and (e) changes in organizational behavior. Long-term impacts have included maintenance of TWH best practices in SMEs, safer and healthier workplaces, and strategic partnerships that lead to increased capacity for the TWH approach.

Two examples illustrate how SMEs that engaged through Health Links have taken steps to adopt and implement health and safety practices.

Example 1: A Construction Company

U.S. Engineering, a Colorado-based construction company with 586 employees, has incorporated health and safety into its mission and value statement:

The mission of our company wellness program is to improve the lives of our team members and their families by supporting a culture of mental, emotional, and physical well-being. As a mechanical contractor, we help build hospitals, schools, and a variety of other facilities in our community. So every morning when we go to work, we remember why we strive to be the best at what we do, because we are making lives and communities better and strengthening the place we call home. The health and safety of our employees is important because our people

are key to achieving this mission. And as a construction company, safety is not just one of our priorities, it's one of our core values. Looking out for one another is at the heart of what safety means for our organization. (Health Links, n.d.b)

The company has taken several steps to incorporating health and safety components into the workplace, including the following:

- Hired a safety director who runs the partners in safety program, which encourages and holds employees responsible for taking an active role in safety on the job; carries out the "Believe in Zero"¹ philosophy, which sets values to keep workers safe and healthy every day; runs safety training classes; and offers monthly safety meetings.
- Surveyed employees to address health and wellness needs to form a seven-member wellness steering committee, wrote a mission statement, branded the program, solicited ideas, and communicated a clear and consistent message.
- Offers and promotes strong health insurance benefits, an employee assistance program, an in-house exercise facility, water stations, and team sponsorships for community events.
- Takes an integrated approach to tracking and reviewing data, including medical claims, absenteeism, turnover (i.e., employee retention), safety records (e.g., injuries, illnesses, experience modification rate), and employee participation and feedback surveys.

In this example, the business has coordinated, and, in some instances, integrated internal and external TWH activities into core business activities and the company's overall core values. The company has been successful in adopting and implementing the TWH program by focusing on core areas of leadership commitment, employee feedback, frequent and consistent messaging, and evaluation. These efforts have allowed leaders to adapt and maintain health and safety as a business priority.

Example 2: A Rural Health Clinic

Mountain Family Health Centers is a small health clinic with 13 employees and is located in rural Colorado. The center engaged with Health Links to assess and benchmark, and to learn what first steps to take to improve health and safety in the workplace. As a result, the center stressed the importance of having broad representation to provide feedback and gain employee buy-in, and provided a list of tips:

- Gain leadership support by having a clear plan of action.
- Collaboration is key.
- Start a committee made of representatives from across the organization.

¹Believe in Zero is a campaign the company implements to strive toward zero injuries or fatal accidents.

- [Workplace health and safety] is a living and breathing plan that should evolve. Communicate clearly and often to staff about any changes and successes. (Health Links, n.d.a)

For this small business, the priority for TWH program adoption and implementation was to set goals and define a process that allowed it to successfully convince leadership that employee health and safety was significant to how the business functions every day. This theme is common to every business regardless of size. What this case illustrates is how integrating the TWH approach can be presented to SMEs as low-cost, low-demand ways as simple as incorporating communication into existing staff meetings using informal methods, such as team-huddles to gather feedback, and presenting small successes through managers. Importantly, the business recognized the value of involving its workforce in decision making, itself an important factor in reducing workplace stress.

Through the Health Links experience of implementing the TWH program into practice—even though many participating businesses have been identified as early adopters—we learned that SMEs are willing to engage. The needs of businesses may vary, which requires programs be approachable and adaptable to SMEs. Because the business case for SMEs is largely focused on the VOI, strategies should address the impact of the TWH approach on employee morale, recruitment, and retention, and, overall, the influence that establishing a healthy company culture can have on workers, their families, and even the larger community. Importantly, local partnerships are essential to reaching and disseminating information to SMEs. Although not all businesses are addressing safety as their number one priority, the Health Links program has helped introduce safety to many SMEs by way of engaging them first around health and wellness. It has been critical to broadening the definitions of wellness and safety to reach SMEs and have them embrace the TWH approach through the lens of being a “healthy business.” Doing so has allowed them to self-define what the TWH program means to them and their workers, and to take a more all-inclusive approach to improving overall employee well-being that is best suited their organization and employee needs. Key stakeholders within individual SMEs have included the owner, middle managers, and the employees themselves. Each needs to be involved in defining the values, goals, and strategies for the TWH approach, and making sure everyone in the businesses is aware of the commitment to health and safety. Maintenance and sustainability of the TWH program depends on commitment from owners and managers, retention of wellness champions within the organization, and an established health and safety culture that is set before adopting and implementing new TWH activities.

RESEARCH GAPS AND SPECIAL CHALLENGES

More research needs to be conducted to understand how engaging SMEs is related to the context and characteristics of the organization, including the culture that often is set by the values, behaviors, and attitudes of the owner and

leadership teams. Future research also is needed to determine if engagement with SMEs through assessments, consultation, and training will result in sustained changes in organizational behavior and, ultimately, in improved worker health, safety, well-being, and productivity (Bradley et al., 2016). As one of NIOSH's Centers of Excellence for *Total Worker Health*, the Center of Health, Work & Environment at the Colorado School of Public Health has designed a longitudinal, prospective, randomized controlled study to test these hypotheses. Importantly, that study also will examine how social networks and communications impact outcomes at the organizational level (Center for Health, Work & Environment, 2017). It is critical to improve not only the access to TWH information but to conduct research on dissemination, adoption, and how businesses use the information. There is a need to develop a business opportunity model specific to SME that presents the tangible benefits around worker productivity, recruitment, retention, and organizational reputation in the community.

The TWH program has the potential to be a useful approach to improving safety, health, and well-being in the SME environment. However, more outreach and dissemination are needed to increase awareness, knowledge, and adoption of best practices (Cunningham et al., 2014; Schulte et al., 2003). It also is important to design programs that are feasible to understand and adopt. We need skilled TWH practitioners in businesses, in the occupational safety and health field, and at the community level that have both competency in TWH fundamentals as well as experience consulting with small enterprises to help businesses adopt and implement the TWH program. More development also is needed to define TWH competencies and address new workforce training and education. Despite the challenges inherent in conducting research in the SME setting, studies are needed to improve quantitative and qualitative understanding of the TWH program in SMEs.

REFERENCES

- Anger, W. K., Elliot, D. L., Bodner, T., Olson, R., Rohlman, D. S., Truxillo, D. M., . . . Montgomery, D. (2015). Effectiveness of *Total Worker Health* interventions. *Journal of Occupational Health Psychology*, 20, 226–247. <http://dx.doi.org/10.1037/a0038340>
- Bradley, C. J., Grossman, D. C., Hubbard, R. A., Ortega, A. N., & Curry, S. J. (2016). Integrated interventions for improving total worker health: A panel report from the National Institutes of Health Pathways to Prevention workshop: *Total Worker Health—What's work got to do with it?* *Annals of Internal Medicine*, 165, 279–283. <http://dx.doi.org/10.7326/M16-0740>
- Burton, J., & World Health Organization. (2010). *WHO healthy workplace framework and model: Background and supporting literature and practices*. Retrieved from http://apps.who.int/iris/bitstream/handle/10665/113144/9789241500241_eng.pdf?sequence=1&isAllowed=y
- Center for Health, Work & Environment. (2017). Small + safe + well (SSWell) [Study]. Retrieved from <http://www.ucdenver.edu/academics/colleges/PublicHealth/research/centers/CHWE/Research/Pages/SSWell.aspx>
- Centers for Disease Control. (2016). Worksite Health ScoreCard. Retrieved from http://www.cdc.gov/dhbsp/pubs/worksite_scorecard.htm
- Clarke, S. (2010). An integrative model of safety climate: Linking psychological climate and work attitudes to individual safety outcomes using meta-analysis. *Journal of*

- Occupational and Organizational Psychology*, 83, 553–578. <http://dx.doi.org/10.1348/096317909X452122>
- Cunningham, T. R., Sinclair, R., & Schulte, P. (2014). Better understanding the small business construct to advance research on delivering workplace health and safety. *Small Enterprise Research*, 21, 148–160. <http://dx.doi.org/10.1080/13215906.2014.11082084>
- Feltner, C., Peterson, K., Palmieri Weber, R., Cluff, L., Coker-Schwimmer, E., Viswanathan, M., & Lohr, K. N. (2016). The effectiveness of *Total Worker Health* interventions: A systematic review for a National Institutes of Health Pathways to Prevention workshop. *Annals of Internal Medicine*, 165, 262–269. <http://dx.doi.org/10.7326/M16-0626>
- Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: The RE-AIM framework. *American Journal of Public Health*, 8, 1322–1327. <http://dx.doi.org/10.2105/AJPH.89.9.1322>
- Harris, J. R., Hannon, P. A., Beresford, S. A., Linnan, L. A., & McLellan, D. L. (2014). Health promotion in smaller workplaces in the United States. *Annual Review of Public Health*, 35, 327–342. <http://dx.doi.org/10.1146/annurev-publhealth-032013-182416>
- Harvard School of Public Health, Center for Work, Health, & Well-Being. (2012). *SafeWell practice guidelines: An integrated approach to worker health*. Retrieved from http://centerforworkhealth.sph.harvard.edu/sites/default/files/safewell_guidelines/SafeWellPracticeGuidelines_Complete.pdf
- Hasle, P., & Limborg, H. J. (2006). A review of the literature on preventive occupational health and safety activities in small enterprises. *Industrial Health*, 44, 6–12. <http://dx.doi.org/10.2486/indhealth.44.6>
- Health Links. (n.d.a). Success stories: Mountain Family Health Centers/Glenwood Springs, CO [Interview]. Retrieved from <https://www.healthlinkscertified.org/what-we-do/success-stories/mountain-family-health-centers>
- Health Links. (n.d.b). Success stories: U.S. Engineering Company/Westminster, CO [Interview]. Retrieved from <https://www.healthlinkscertified.org/what-we-do/success-stories/us-engineering>
- Institute of Medicine. (2014). *Promising and best practices in Total Worker Health: Workshop summary*. Washington, DC: The National Academies Press.
- Jenkins, H. (2009). A “business opportunity” model of corporate social responsibility for small-and medium-sized enterprises. *Business Ethics: A European Review*, 18, 21–36. <http://dx.doi.org/10.1111/j.1467-8608.2009.01546.x>
- Jinnett, K., Schwatka, N., Tenney, L., Brockbank, C. V. S., & Newman, L. S. (2017). Chronic conditions, workplace safety, and job demands contribute to absenteeism and job performance. *Health Affairs*, 36, 237–244. <http://dx.doi.org/10.1377/hlthaff.2016.1151>
- Linnan, L., Bowling, M., Childress, J., Lindsay, G., Blakey, C., Pronk, S., . . . Royall, P. (2008). Results of the 2004 national worksite health promotion survey. *American Journal of Public Health*, 98, 1503–1509. <http://dx.doi.org/10.2105/AJPH.2006.100313>
- McCoy, K., Stinson, K., Scott, K., Tenney, L., & Newman, L. S. (2014). Health promotion in small business: A systematic review of factors influencing adoption and effectiveness of worksite wellness programs. *Journal of Occupational and Environmental Medicine*, 56, 579–587. <http://dx.doi.org/10.1097%2FJOM.0000000000000171>
- McLellan, D. L., Cabán-Martinez, A. J., Nelson, C. C., Pronk, N. P., Katz, J. N., Allen, J. D., . . . Sorensen, G. (2015). Organizational characteristics influence implementation of worksite health protection and promotion programs: Evidence from smaller businesses. *Journal of Occupational & Environmental Medicine*, 57, 1009–1016. <http://dx.doi.org/10.1097/JOM.0000000000000517>
- McPeck, W., Ryan, M., & Chapman, L. S. (2009). Bringing wellness to the small employer. *American Journal of Health Promotion*, 23, 1–12. <http://dx.doi.org/10.4278%2Fajhp.23.5.tahp>

- National Small Business Association. (2012). *Workplace wellness programs in small business: Impacting the bottom line*. Retrieved from <http://www.nsba.biz/wp-content/uploads/2012/09/wellness-survey-v3.pdf>
- Newman, L. S., Stinson, K. E., Metcalf, D., Fang, H., Brockbank, C., Jinnett, K., . . . Goetzel, R. Z. (2015). Implementation of a worksite wellness program targeting small businesses: The Pinnacle Assurance health risk management study. *Journal of Occupational & Environmental Medicine*, 57, 14–21. <http://dx.doi.org/10.1097/JOM.0000000000000279>
- Office of Disease Prevention and Health Promotion. (n.d.). *HealthyPeople 2020*. Retrieved from <https://www.healthypeople.gov/>
- Ozminkowski, R. J., Serxner, S., Marlo, K., Kichlu, R., Ratelis, E., & Van de Meulebroecke, J. (2016). Beyond ROI: Using value of investment to measure employee health and wellness. *Population Health Management*, 19, 227–229. <http://dx.doi.org/10.1089/pop.2015.0160>
- Pronk, N. P. (2013). Integrated worker health protection and promotion programs: Overview and perspectives on health and economic outcomes. *Journal of Occupational & Environmental Medicine*, 55, S30–S37. <http://dx.doi.org/10.1097/JOM.0000000000000031>
- Pronk, N. P., McLellan, D. L., McGrail, M. P., Olson, S. M., McKinney, Z. J., Katz, J. N., . . . Sorensen, G. (2016). Measurement tools for integrated worker health protection and promotion: Lessons learned from the SafeWell project. *Journal of Occupational & Environmental Medicine*, 58, 651–658. <http://dx.doi.org/10.1097/JOM.0000000000000752>
- Schulte, P. A., Okun, A., Stephenson, C. M., Colligan, M., Ahlers, H., Gjessing, C., . . . Sweeney, M. H. (2003). Information dissemination and use: Critical components in occupational safety and health. *American Journal of Industrial Medicine*, 44, 515–531. <http://dx.doi.org/10.1002/ajim.10295>
- Schwatka, N. V., Atherly, A., Dally, M. J., Fang, H., vS Brockbank, C., Tenney, L., . . . Newman, L. S. (2017). Health risk factors as predictors of workers' compensation claim occurrence and cost. *Occupational & Environmental Medicine*, 74, 14–23. <http://dx.doi.org/10.1136/oemed-2015-103334>
- Schwatka, N. V., Tenney, L., Dally, M. J., Scott, J., Brown, C. E., Weitzenkamp, D., . . . Newman, L. S. (2018). Small business *Total Worker Health*: A conceptual and methodological approach to facilitating organizational change. *Occupational Health Science*, 2, 25–41. <http://dx.doi.org/10.1007/s41542-018-0013-9>
- Sinclair, R. C., Cunningham, T. R., & Schulte, P. A. (2013). A model for occupational safety and health intervention diffusion to small businesses. *American Journal of Industrial Medicine*, 56, 1442–1451. <http://dx.doi.org/10.1002/ajim.22263>
- Taylor, A. W., Pilkington, R., Montgomerie, A., & Feist, H. (2016). The role of business size in assessing the uptake of health promoting workplace initiatives in Australia. *BMC Public Health*, 16, 353. <http://dx.doi.org/10.1186/s12889-016-3011-3>
- Thompson, J., Schwatka, N. V., Tenney, L., & Newman, L. S. (2018). *Total Worker Health*: A small business leader perspective. *International Journal of Environmental Research and Public Health*, 15, 2416. <http://dx.doi.org/10.3390/ijerph15112416>
- U.S. Census Bureau. (n.d.). Annual survey of entrepreneurs (ASE). Retrieved from <https://www.census.gov/programs-surveys/ase/data/tables.html>
- Vives, A. (2006). Social and environmental responsibility in small and medium enterprises in Latin America. *Journal of Corporate Citizenship*, 2006, 39–50. <http://dx.doi.org/10.9774/GLEAF4700.2006.sp.00006>
- Williams, J. A., Nelson, C. C., Cabán-Martínez, A. J., Katz, J. N., Wagner, G. R., Pronk, N. P., . . . McLellan, D. L. (2015). Validation of a new metric for assessing the integration of health protection and health promotion in a sample of small and medium size employer groups. *Journal of Occupational and Environmental Medicine*, 57, 1017–1021. <http://dx.doi.org/10.1097/JOM.0000000000000521>

Total Worker Health

EDITED BY

Heidi L. Hudson, Jeannie A. S. Nigam,
Steven L. Sauter, L. Casey Chosewood,
Anita L. Schill, and John Howard



**PALM BEACH STATE
COLLEGE**

Palm Beach State College
Library Learning Resource Center
4200 Congress Avenue
Lake Worth, FL 33461



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