Health Promotion Programs and Unions

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Abstract

The purpose of this project was to gain a better understanding of unions' perceptions and what research exists on health promotion programs in the workplace. The goal of this project is to identify current practices by labor unions with regard to wellness/ health promotion programs and to use this preliminary information to identify the roles labor unions can and do play in successful wellness/health promotion initiatives.

I. Goals of the Project

With the rise of health care costs and the increasing rate of chronic diseases and obesity in the American population, workplaces have been involved in employee health programs. These programs can cover a wide range of health issues ranging from cardiovascular health to substance abuse. In addition, occupational safety and health programs are seeing the link of personal health risks, such as obesity, to the worker's compensation program. Labor unions can have a role in employee involvement and program development. The purpose of this project was to gain a better understanding of unions' perceptions and what research exists on health promotion programs in the workplace.

The goal of this project is to identify current practices by labor unions with regard to wellness/health promotion programs and to use this preliminary information to identify the roles labor unions can and do play in successful wellness/health promotion initiatives.

Using a literature review of current articles and interviews with relevant labor leaders, health and welfare trustees and other sources this report explores the following issues:

- What are the current trends in worksite wellness or health promotion programs in general, and especially in unionized work places?
- To what extent are unions involved in developing and promoting wellness programs both in and out of the work site?
- What motivates unions to become active and proactive on this issue?
- What are some of the barriers?
- What are the potential benefits to unions?

II. Study Methodology

Literature review:
A review of research literature was conducted in May/June 2007 of peer-reviewed journals, books, labor newsletters/websites, and "popular" information from a variety of sources. Search engines such as ArticleFirst and Medline using the key words such as "worksite health promotion", "worksite health promotion and unions" "wellness and unions" and "health promotion and occupational safety and health" were used. Other sources were identified through bibliographies of relevant articles or from the interviews.

Interviews:
A series of phone and email interviews were conducted with labor leaders, health and welfare fund trustees and staff, employee wellness program administrators and academic researchers working in this area to address issues that may not have been covered by published studies. The topics covered included:

- Their experiences with and attitudes towards wellness/health promotion programs. This would include successes, barriers and lessons learned.
- What role the union played in the development, promotion and evaluation of the program.
- What programs their employer/union had or would be interested in having: chronic illness prevention, stress (mental health), health and welfare plan (cost containment), advocacy (bullying, domestic violence, women's health), workers' compensation and/or decreasing workplace injuries, lifestyle (obesity, fitness, nutrition), substance abuse, and other health promotion.

The main points of these interviews are summarized in section IV and a full copy of the interview script is included in Appendix A.

III. Literature Review

Section A of the literature review summarizes relevant, recently (within the last five years) published peer-reviewed articles that reflect current trends and issues in U.S. worksite health promotion/wellness programs. In addition, several articles are included that focus on health promotion/wellness interventions in unionized settings, to give a sense of both their level of involvement and the role trade unions play (or could potentially play) in accessing worker populations and advocating for, promoting and supporting these efforts.

Section B includes recent studies that discuss significant trends in wellness/health promotion literature to recommend the integration of worksite wellness and health promotion with occupational health and safety/risk management - using a more "holistic" approach to worker health at work.

Section C has references and abstracts taken from the *Young Adults in the Workplace (YIW) Literature Review Annotated Reference List.* (US Dept of Health and Human Services. Substance Abuse and Mental Health Services Administration. Center for Substance Abuse and Prevention. Revised Jan 25, 2005). These references included in this paper were selected because of the discussion of the barriers to substance abuse programs and the inclusion in wellness/health promotion programs.

Section D summarizes popular (non-peer reviewed) resources regarding wellness and health promotion. Finally, Section E contains Oregon union websites who reference health and wellness programs.

A. Health Promotion/Wellness Programs and Unions

Birken BE, Linnan L. Implementation Challenges in Worksite Health Promotion Programs. North Carolina Medical Journal 2006; 67(6): 438 - 441.

Birken and Linnan discuss the top barriers listed by employers in the 2004 National Worksite Health Promotion Survey and suggest strategies for overcoming

them. The most common barriers mentioned by employers were: lack of interest by employees, lack of staff resources, lack of funding, lack of participation by high risk employees and lack of management support. The authors argue that engaging employees and managers early in the planning process allows them to develop strategies to plan for and overcome these barriers.

In the case of low employee interest, many employers view low participation as low interest, when there might be unrelated underlying causes for low participation such as: not knowing about the program, not wanting to pay for the program, not being able to access the program because it is inconvenient or because of issues like child care. Employees that are exposed to stressful or hazardous working conditions may be skeptical about these programs if the other workplace problems are not being dealt with. In addition, some employees have privacy concerns and won't participate in an employer-sponsored program.

The authors suggest that most of these concerns can be addressed by proper planning to make high quality programs accessible and convenient to employees. Having worker input to program design is important, which includes involving unions if they are present at the work site. Working conditions that are stressful or hazardous must also be addressed in accompanying programs. They indicated more research is needed on increasing participation of high-risk workers but some strategies might include peer educators and offering online options that maintain privacy. To increase management support it should be cultivated at all levels. Management should be represented on the wellness committee, and key managers should be interviewed to get their input.

The authors suggest that employers might find staff resources by using existing staff and "wellness committees". Funding needs might be addressed by partnering with health care providers, local hospitals and other funding sources, but employers should remember that health promotion is an "investment in human capital" that could lead to reduced costs, and be willing to fund them internally. The planning process should include a comprehensive evaluation plan to track the return on investment. National and local data should be used to benchmark success and regular reports should be issued.

The authors conclude that an effective planning effort that engages employees in all stages - planning, developing, implementing and evaluating – will result in work site health promotion programs that achieve the desired employee health outcomes and that are sustainable over time.

Pronk N. Worksite Health Promotion: Incentives - The Key to Stimulating Awareness, Interest and Participation. American College of Sports Medicine Health and Fitness Journal 2004;8(1): 31 - 33.

In this short article, Pronk advocates the use of incentives to promote participation in worksite health promotion. Intrinsic motivators have more long-term impacts in behavior, but extrinsic motivators such as incentives might encourage the "initial adoption" of a new behavior in someone who would not have even considered it otherwise. One study Pronk cited showed a much better return in completing a health risk assessment with a group given a financial incentive for completing it compared with a group who simply received a mailing (67.7% vs. 20.1%). Some of the incentive

programs he listed were: cash payment, health care premium differential (paying less for the premium), more time off, i.e. "well days", merchandise award programs and enhanced benefit programs, i.e. enhanced medical benefit coverage. Pronk warns that there are legal and regulatory issues, for example HIPAA rules, ADA, and tax issues, all of which need to be considered when designing the benefit or incentive. These restrictions can be overcome, for example HIPAA rules do allow positive incentives, and programs can be restructured to allow employees with a disability to qualify by meeting alternative criteria, and incentives under $50 might be tax exempt.

Hart K. The Aging Workforce: Implications for Health Care Organizations. Health Economic 2007; 25(2): 101 - 102.

Hart discusses the "aging workforce" as a phenomenon that receives a lot of attention especially in industries such as health care that have a huge problem recruiting and retaining workers. The number of workers 65 and older is expected to increase nearly seven times as fast as the total labor force, as workers postpone retirement. Health care employers have a lot to gain if workers, especially nurses, are willing to extend their careers beyond what is considered to be retirement age. Strategies to enhance the retention of older workers included: Health promotion programs and ergonomic programs, for example ergonomically improved office equipment, equipment that assists with lifts/transfers.

Berliner HS, Gibson G, Devine-Perez C. Health Care Workers' Union and Health Insurance: The 1199 Story. International Journal of Health Services 2001; 31(2): 279 - 289.

Local 1199, the National Health and Human Service Workers Union, SEIU, in New York City, is the largest healthcare worker union in the U.S, with 200,000 members in 2000. Representing health care workers puts the union in a unique situation when dealing with health care costs. This article discusses ways in which the union and the union/management trust fund, National Benefit Fund (NBF) have implemented programs to improve health care of its members through its union structure. While not the main focus of the article, one improvement that is of particular interest to this report is the health promotion programs implemented by the union, including a worksite-based hypertension program at on-site clinics where employees are screened on work time. These programs have had high member participation and the outcomes have been very positive. Over 8,000 of the SEIU 1199 employees have been screened, of these 30% have been identified to be hypertensive and over 1,200 of these are in treatment. Of these 1,200 in treatment, 71% now have blood pressure under 140/90 as compared to 21% for the U.S. Population as a whole. To bolster participation, union delegates are trained to counsel workers on nutrition and exercise and to remind workers about appointments. Union delegates also lead lunchtime walks or other exercise and participate in an extensive program to disseminate information about quality care. The NBF follows up on preventive care with both the individual and the provider in several categories: mammograms, immunizations, heart attack patients who are not on beta-blockers, PSA testing, asthmatics not taking anti-inflammatory drugs, and with diabetics who have not had AC13 testing.

The authors note that union plans, unlike commercial plans, have a better ability

to organize health promotion and prevention activities because they have a longer and closer relationship with their members. The average length of member coverage for a commercial HMO is 18 months, for the NBF it is 18 years. This allows the NBF to do long-term evaluation of its programs.

Edington M, Karjalainen T, Hirschland D, Edington D. The UAW-GM Health Promotion Program: Successful Outcomes. American Association of Occupational Health Nurses 2002; 50(1): 26 - 31.

This article describes the success of the joint labor management worksite health promotion program at GM, "LifeSteps". Originally started in 1996, the multi-site, multi-component health awareness program focuses not just on the workers, but on the families and retirees as well (over one million individuals over the age of 18.) The strategy of the program is to keep healthy individuals healthy and to reduce the health risks of individuals with high risk through encouraging low-risk lifestyles. In addition to a joint labor management format, it integrates efforts of human resources and the occupational health and safety departments in order to address common concerns relating to the health of the individual. Data collection (on health improvement, risk reduction and participation) and evaluation of data is a key component of the program because as data becomes available it is used to modify the program to improve it.

The core program consists of: an annual Health Risk Assessment (HRA), 24 hour telephone access to an RN and an audiotape library, a website, health information newsletter and a health care book to each household. The HRA is done in a variety of ways to reach a diverse population who may not be onsite and confidentiality is assured. The HRA can trigger a number of other programs based on identified risks. There is also a more intensive intervention being piloted. The pilot studies a program that conducts health screenings on work time.

Participant surveys show high level of participation and satisfaction with the overall program (85% supported the program). The number of low risk individuals has increased in a three-year period. The success of this program can be attributed to the UAW and GM leaderships' use of high-level joint labor management committees and worksite level joint committees, in addition to using third party providers, ensuring confidentiality and using data to make decisions about what programs to offer.

Ringen K, Anderson N, McAfee T, Zbikowski S, Fales D. Smoking Cessation in a Blue-Collar Population: Results From an Evidence-Based Pilot Program. American Journal of Industrial Medicine 2002; 42(5): 367 - 377.

The authors of this smoking cessation study point out that Taft-Hartley Funds provide group health care coverage for 10 million union workers and their dependents, 40% of which are smokers. Due to a lack of evidence demonstrating the effectiveness of smoking cessation programs, these labor-management funds have been reluctant to invest in them. To address this concern, a prototype for Taft Hartley funds was piloted with the Carpenters Health and Security Trust of Western Washington. A review of the literature provided the best practices in successful smoking cessation programs, and these were incorporated into the pilot program. These best practices included removing all constraints such as co-pays, deductibles; assigning staff people to be points of contact, contracting with a counseling "vendor", covering the medications,

promoting the program through the union by letters and presentations at union meetings and monitoring the progress through progress reports, statistics and making changes when needed. 935 smokers participated in the program. The pilot evaluated 325 participants with at least 12 months since enrollment. The average age was 41.4 and 75% were male, 63% smoking a pack a day for more than 20 years. The overall quit rate was 27.5%. The cost of the program was $1025.28 per smoker who quit or $11.78 per full-time equivalent employee covered by the Fund per year. The estimated savings in reduced tobacco-related medical costs was estimated to be 15 times the cost of the program, or an annual return on investment of 27.6%.

The authors conclude that smoking cessation programs can be effective with hard-to-reach populations such as construction workers if the program is designed to meet their needs and environment. Health plans should consider whether they might be in violation of their fiduciary duties if they don't offer smoking cessation benefits.

Barbeau E, Li Y, Calderon P, Hartman C, Quinn M, Markkanen P, et al. Results of a Union-Based Smoking Cessation Intervention for Apprentice Iron Workers (United States). Cancer Causes and Control 2006; 17(53): 53 - 61.

Blue-collar workers are more likely to smoke, smoke heavily and to have more trouble quitting than white-collar workers. This is a particular concern because of the additional hazards that blue-collar workers are more likely to face on the job – asbestos, silica, and combustion products. The authors believe that unions may be an effective channel for smoking cessation programs due to their existing communications structures and access to the workers through the apprenticeship programs. This study population was ironworker apprentices in Berkeley, California. The study model included workers' concerns about health and safety as well as smoking, as part of a "holistic" approach to worker health. The study, conducted over a four-month period included a "1 – h toxics and tobacco" module as part of the regular apprenticeship training, a tobacco use cessation group that consisted of eight weekly sessions, nicotine replacement therapy, an educational poster, materials and articles in the monthly union newsletter. For those who did not want to attend a "group", there was a "do-it-yourself-quit-kit". The union hall was smoke-free and the union insurance covered some of the nicotine replacement. Baseline and final data was collected from the apprentices by survey in a classroom setting, with a small cash incentive. 440 of the 480 (91%) completed the baseline survey, 381 of 427 (87%) completed the final survey. Baseline smoking rate was 41%; post-intervention quit rate was 19.4%. Participation in the intervention component was low, but participation in the intervention increased the likelihood of quitting by three-fold.

The authors concluded that labor union apprenticeship programs are a "promising venue" for smoking cessation programs, especially if they are framed in a health promotion/protection model.

Barbeau E, Goldman R, Roelofs C, Gagne J, Harden E, Conlan K, et al. A New Channel for Health Promotion: Building Trade Unions. American Journal of Health Promotion 2005; 10(4): 297 - 303.

The authors of this article promote the use of labor unions as a channel for health promotion interventions with working class populations who are at increased

risk for smoking and poor diet. Unions offer great potential and have not been evaluated as a channel for reaching working class populations. The advantages to working with unions for health promotion include: their members are likely to be in working class occupations, unions have communications structures that facilitate research and programs and they provide a strong sense of community and identity, including conveying respect toward their members – by valuing the work that their members do and protecting their rights. Respect is a key principle in adult learning. Finding ways to "resonate" with elements of union culture might enhance health promotion interventions, similar to interventions for African-Americans through Black churches.

The study entailed a survey with a nationally representative sample of unionized construction workers (members of Laborers International Union of North America, LIUNA). The study's aims were to test the effectiveness of a print and telephone-based intervention in reducing smoking and increasing fruit and vegetable consumption. Another goal was to understand the meaning and function of union membership in the workers' lives in order to use this information in the intervention design. Attitudes about the union were assessed by several measures during a survey and focus groups. A total of 1109 members responded to the survey (44% of eligible members). 88 members participated in focus groups. 41% of the respondents were smokers and 86% did not eat at least five servings of fruits and vegetables per day. The vast majority held strongly positive views about their union, which they viewed as helping them get better jobs with better wages, benefits and working conditions, including a safe work environment. In addition, the union gave workers a sense of "solidarity" and a sense of "belonging". The union was also viewed as a trusted source of information, and that they felt an "obligation" to read information that came from the union. Many indicated that they would mistrust someone calling them unless they were from the union. This contrasted with the participants' mistrust of government, tobacco industry and their employers.

The authors used the information collected in the survey and focus groups about attitudes towards the union in their intervention design. The "message" in calls and written materials reflected the workers strong work ethic, their desire to be healthy in order to stay employed and provide for their families. The respect that workers had for their union and leaders were employed both on a surface level (union logos, union bug, photos of union members and leaders) and on a deeper level (using identified themes that resonate with the union culture.) The authors believe that using the union as a channel helped to make the intervention (which is the next article reviewed) "culturally relevant" to the workers, and that this will hopefully motivate the workers to participate in the forth-coming research.

Increased collaboration between public health practitioners and labor unions on health promotion issues could be an effective strategy for health promotion interventions, and more unions are becoming interested in participating in health promotion interventions.

Sorensen G, Barbeau E, Stoddard A, Hunt MK, Goldman R, Smith A, et al. Tools for Health: The Efficacy of a Tailored Intervention Targeted For Construction Laborers. Cancer Causes and Control 2007; 18:51 - 59.

This article discussed the results of the smoking cessation and nutrition intervention described in the previous article. Using the "tailored" messages developed after doing a national survey with members of the Laborers union. The results were impressive. In promoting tobacco use cessation, 19% in the intervention group quit, compared with 8% in the control group. With fruit and vegetable consumption, the intervention group increased their consumption by 1.5 servings, while the control group showed a slight decrease in servings. These results show that a tailored intervention can be successful among a high-risk, mobile workforce such as construction laborers, and that the union can be an important partner in accessing and motivating these workers.

Elliot D, Goldberg L, Kuehl K, Moe E, Breger R, Pickering M. The PHLAME (Promoting Healthy Lifestyles: Alternative Models' Effects) Firefighter Study: Outcomes of Two Models of Behavior Change. Journal of Occupational and Environmental Medicine 2007; 49 (2): 204 - 213.

This project's objective was to compare two types of interventions to promote healthy lifestyles among firefighters, a "high-risk" group for many health concerns but especially for cardiovascular risk. 50% of "on the job" deaths are heart attacks, compared with 10% in other emergency services. The program was designed to increase consumption of fruits and vegetables (5 servings a day), increase exercise to at least 30 minutes a day, reduce fat intake to less than 30% a day and to work towards the appropriate body weight. These are measures that have well-established health benefits, and yet most Americans, including firefighters, do not follow these guidelines. Previous interventions with this group have been largely unsuccessful.

There is an interest from many stakeholders, including the National Institutes of Health (the funder) in assessing ways to promote healthier habits. The two different methods used were the Team-Centered Curriculum and One-on-One Motivational Interviewing. There was also a control group. 696 firefighters at four stations participated in the study, with the blessing of management and the union.

The team approach used aspects of "Social-Cognitive" theory, taking advantage of factors such as peer bonds, mutual accountability, and shared responsibility or rewards. This approach has been effective in changing members attitudes and behaviors in other settings, such as sports teams. Firefighters are almost perfect for this type of intervention – their work structure and schedule reinforces a "team" dynamic.

For the motivational interviewing each firefighter met with a trained counselor, at the worksite and on work time. The counselor helped the firefighter determine their goals from their health assessment and followed up with meetings by phone and or in person over the next six months.

Both intervention groups received a 160-page booklet on Health and Fitness. The control groups only received their health assessment results and a listing of normal values. Both of the interventions had high retention rates, and positively impacted nutrition, were associated with less weight gain and "enhanced general well-being". The authors believe that even considering the limitations of the study (unique work situation, almost all men of the same racial and ethnic distribution) that the team-centered format is an "effective, easily exportable and economically feasible" way to

promote health in the workplace.

Linden A, McClay W, Leo MC. Effect of Motivational Interviewing-Based Health Coaching on Employees' Physical and Mental Health Status. Journal of Occupational Health Psychology 2006; 11(4): 358 - 365.

This article discusses Motivational Interviewing (MI); a health coaching method. MI is a behavioral intervention that has gained popularity in public health because "of its ability to address multiple behaviors, health risks and illness self-management." It has been used quite a bit in substance abuse programs. Motivational Interviewing differs from "traditional" health coaching because it doesn't use "scare tactics" and is not "confrontational, forceful, guilt-ridden, or authoritarian; rather it is shaped by an understanding of what triggers change." The "coach" emphasizes the three underlying assumptions of MI – collaboration evocation and autonomy to establish rapport, reduce resistance and elicit one's own argument for change - "eliciting change talk." It has been found to be a more effective method for behavior change than traditional "advice-giving". In this study, which took place at OHSU, used OHSU employees as participants. One note is the fact that the participants who self-selected into the intervention group were higher risk than those in the control group, which is not usually the case in health promotion interventions. The authors advocate for use of this method both in terms of its success rate but also because using health coaches trained in MI might be cheaper for employers to implement than mental health services, but with similar results.

B. Integrating Wellness and Health Promotion with Occupational Health and Safety

Schult T, McGovern P, Dowd B, Pronk N. The Future of Health Promotion/Disease Prevention Programs: The Incentives and Barriers Faced by Stakeholders. Journal of Occupational and Environmental Medicine 2006; 48(6): 541 - 548.

In this article, Schult et al list the shortcomings of health promotion and disease prevention (HP/DP) programs in the workplace, but then discuss strategies to increase the programs' effectiveness, arguing for a more "holistic" approach that integrates occupational safety and health and health promotion.

Many HP/DP programs are limited in scope and are time-limited, often dealing with only one health problem such as high blood pressure; so their effect on overall employee health is limited. Participation tends to be low, and those who participate tend to be in better health and working in salaried positions rather than clerical or blue collar positions. There are exceptions – i.e. the HP program that GM/UAW jointly planned and financed "Lifesteps", which emphasizes improving health over cutting healthcare costs.

Schulte et al discusses features of the labor force, such as the fact that 80% of the employees in the private sector work in businesses with less than 50 people; and that 8% are self-employed contribute to barriers of having HP/DP programs due to limited purchasing power and resource constraints. Dependents or retirees who are not in the workplace, and are hard to reach, incur many of the costs of healthcare. The

authors cite that the government does not spend a lot on population-wide approaches to prevention – only 5% of the trillion spent for healthcare each year. Comprehensive prevention efforts require very complex interventions due to multiple causes of diseases and are expensive. This fact, combined with the fact that cost-effectiveness of various interventions has not been established, make it hard to lobby for increased government investment in prevention efforts and research.

In spite of these barriers and challenges, there are compelling reasons to "push forward" on HP/DP programs, not the least of which is the double-digit healthcare cost increases facing employers and employees. Health risk profiles such as obesity, poor diet, smoking and low levels of physical activity that lead to poor health outcomes and lowered productivity are another reason for employers to continue to support these programs. Employers have a legitimate role in HP/DP programs because of their access to the population and the "bottom line" advantages to them in investing in "human capital". Of course the employee is the most important stakeholder, and research indicates the employee needs incentives beyond the obvious benefits of a healthier lifestyle.

The authors advocate for integrating HP/DP into the organizational culture, having a "healthy organization, which includes supporting employees to be healthy and productive." This would include integrating workplace health and safety and HP/DP, at the workplace and in the public health community, creating alliances between key stakeholders, more integrated services for employees, and more opportunities for funding. They use the current push from the National Institute for Occupational Safety and Health (NIOSH) for an integrated approach to wellness as additional testimony to the need for it.

Schulte P, Wagner G, Ostry A, Blanciforti L, Cutlip R, Krajnak K, et al. Work, Obesity and Occupational Safety and Health. American journal of Public Health 2007; 97(3): 428 - 436.

Schulte et al proposed 5 conceptual models for the inter-relationship of work, obesity and occupational safety and health. They also discuss the ethical, legal and social issues related to addressing obesity in occupational safety and health. On the association of work and working conditions on obesity and body weight, they cite several studies that showed that increased Body Mass Index (BMI) was related to stress and other psychosocial measures. One study the authors cited hypothesized that job stress, psychological strain, long work hours, shift work and overtime all contribute to behaviors that lead to weight gain and abdominal fat accumulation.

The authors also cite studies that showed that a worker's BMI predicts high health care costs and high absence rates. The impact of obesity on work-related diseases were discussed - specifically vibration induced injury, work-related asthma, chemical immunomodulation, musculoskeletal disorders, neurotoxicity, and stress, cardiovascular disease, cancer, occupational safety and use of personal protective equipment. All these sections cited relevant studies that supported further research into the relationship to obesity or clear associations.

The authors state that evidence exists that health promotion guidance is better accepted in a work environment when it addresses both personal and workplace factors. In the workplace, environmental factors and organizational factors can have an

impact on risk for obesity. From this, programs that integrate occupational safety and health factors and obesity prevention strategies should be undertaken.

Schulte et al. also discusses very important issues such as worker privacy and autonomy. Programs that focus on individual behaviors may be perceived as intrusive or insensitive since obesity is a sensitive personal issue. Worksite interventions that benefit all workers are more appropriate. The authors also discuss the bias and stigmatization of overweight persons and the influence that has on employment discrimination. Another major concern that the authors point out is that attention will turn to "blaming the victim" when this goes against the knowledge that obesity is affected by environmental, organizational, genetic, societal and economic factors.

The authors also point out that messages about health risks including obesity are important, must be fact-based, and be in line with proven health protective strategies. Because of the changing relationship of obesity and occupational safety and health (such as, it can be a modifier, an independent factor, a co-factor or a confounding factor) the communications may have to be circumstance specific. The authors use the example of smokers and asbestos communications for developing communications that focus on workplace factors as well as personal factors rather than just personal alone. Finally, the authors discuss workers' compensation and tort liability. Since there is always a struggle to determine work vs. non-work factors for compensations, the addition of obesity, many times as an underlying condition, is complicated.

Schulte et al concludes by emphasizing that occupational morbidity and mortality and obesity are important and prevalent problems in the US. Looking at the issues together may prove to be more efficient for resource use as well as health outcome improvement.

Ostby T, Dement JM, Krause K. Obesity and Workers' Compensation. Archives of Internal Medicine 2007; 167:766 - 773. Samuels S. Occupational Medicine and Its Moral Discontents. Journal of Occupational and Environmental Medicine 2003; 45(12): 1226 - 1233.

Ostby et al used the Duke health and safety surveillance system, which includes all Duke University Health system employees, and Duke University employees to determine the relationship with body mass index (BMI) and worker's compensation claims, associated costs, and lost workdays. This included 11,728 employees who had a health risk appraisal between December 31, 2004 and January 1, 1997. They found a clear linear relationship between BMI and claims. Employees with a BMI of greater than 40 (considered obese) had 11.65 claims per 100 FTEs while those with recommended weight had 5.80. Also effect on the lost workdays, medical claims costs, and indemnity claims were even stronger. They advise that maintaining healthy weight is important for workers and employers and that a complementary intervention for occupational safety and health and healthy eating and activities should be developed and evaluated.

Sorensen G, Barbeau E. Steps to a Healthier US Workforce: Integrating Occupational Health and Safety and Worksite Health Promotion: State of the Science. In: Steps to a

Healthier Workforce; 2004; Washington D.C.: National Institute of Occupational Safety and Health; 2004.

This report discusses in great detail the rationale for integrating OSH and worksite health promotion. It includes a section on "Worker Health in a changing economy" that addresses the changing nature of work in the U.S. over the last few decades and the need for research that addresses these new situations. The authors acknowledge the role that unions have had in protecting workers through OSH, and noted that they also can be helpful in health promotion, even if density is declining in some industries. "Despite their falling membership, unions can be powerful allies for interventions to protect and promote workers' health, particularly among blue-collar and service workers, who are more likely than white-collar workers to belong to a union."

C. Current peer reviewed articles on the integration of wellness/health promotion and substance abuse programs

Ames G.M and C. Janes. 1992. "A Cultural Approach to Conceptualizing Alcohol and the Workplace." Alcohol Health and Research World 16 (2): 112-119.

The authors identify four cultural dimensions that affect alcohol use in the workplace: normative regulation of drinking, quality and organization of work, factors external to the workplace, and drinking subcultures at work. The most influential aspect of workplace culture when it comes to drinking is normative rules that govern alcohol consumption. These include written company policies as well as unspoken cultural norms (e.g. martini lunches, social drinking at company functions). Often, these tacit norms are a powerful social force, with inclusion or exclusion from a group hinging on the decision to join the group for a drink. Several aspects of type and organization of work have been shown to influence alcohol consumption. Work situations that are unstructured, inflexible, highly stressful, or make workers feel powerless or alienated have been shown to promote problem drinking. Factors external to work – religiosity, commitment to community organizations, strong family bonds – can influence workers to either join or shun drinking groups at work. A history of family drinking may induce a worker to seek out a workplace where drinking is a prominent feature of the cultural milieu. Strong commitment to family might also cause workers to absent themselves from carousing after work. In drinking subcultures, alcohol consumption is seen not as a problem behavior but as a means of communication that signifies solidarity, masculinity, job identity, and group values.

Backer, T.E., and K.B. O'Hara. 1991. Organizational Change and Drug Free Workplaces: Templates for Success. New York: Quorum Books.

This book focuses on management styles and behaviors in addressing substance use in the workplace: its intended audience is human resources managers, benefits coordinators, and middle managers. Rather than prescribe solutions – a tactic that would belie the complexity of the problem – the authors provide templates or ways of approaching substance use in the workplace. They also report results from surveys of how companies deal with substance use, assembling a snapshot of organizations' approaches to the problem. The templates are applied to various companies'

approaches to demonstrate successes and failures. The authors assert that we can speak of “addictive” workplaces in the same way we talk about addicted people. Organizations fail when they try to address substance abuse for the same reasons that individuals fail: they evade the complexity of the problem and they look for quick fixes. These are problems that beset management in general – failing to examine root causes and putting out fires instead of preventing them – but these problems are magnified when a crisis becomes acute, as drugs in the workplace did in the mid-1980’s. The authors adopt an organizational change perspective, examining why and how companies fail to adapt. Two of the main reasons are implementation failure (a new idea is attempted but not followed through on, often because inadequate resources are devoted to sustaining it) and information overload (the organization never gets to the implementation stage because the amount and complexity of information is paralyzing). While EAPs represent the primary organizational response to the substance abuse in the workplace, objections to them are not uncommon. They are costly (especially to small employers) and their benefits (productivity not lost, lawsuits not filed) are often hard to quantify. There is also the uncomfortable fact that most people who use EAP do not remain abstinent and many employees get sober without ever using EAP services. Without better information about how EAPs success, including detailed cost-benefit analysis, it will be difficult to improve existing EAPs and convince companies that do not have EAPs to initiate them. The authors see little benefit in journal articles and conferences; they call for information and studies that can be put to use by managers in the workplace. One of the themes of the book is that change is disruptive but necessary. Companies can minimize the disruption caused by implementing an EAP if they work to integrate the EAP fully into the management structure. Collaboration among human resources, benefits, upper management, and the EAP is essential to overcoming the barriers to EAPS and to helping workers with substance us problems.

Bennett, J.B. and W.E. Lehman. 2001. “Workplace Substance Abuse Prevention and Help Seeking: Comparing Team –Oriented and Informational Training.” Journal of Occupational Health Psychology 6 (3): 243-254.

Employees fail to seek help for alcohol or other drug (AOD) abuse because of unhealthy work climates, stigma, an distrust in EAPs. To address such problems, the authors randomly assigned groups of municipal employees (N=260) to two types of training: a 4-hour informational review of EAPs and policy, and an 8-hour training that embedded messages about AOD reduction in the context of team building and stress management. Pre and post training and a 6-month follow up surveys assessed change. Group privacy regulation, EAP trust, help seeking, and peer encouragement increased for team training. Stigma of substance users decreased for informational training. EAP/policy knowledge increased for both groups. A control group showed little change. Help seeking and peer encouragement also predicted EAP utilization. Integrating both tem and informational training may be the most effective approach for improving help seeking and EAP utilization.

Bennett, J.B. and W.E. Lehman. 1998. "Workplace Drinking Climate, Stress, and Problem Indicators: Assessing the Influence of Teamwork (Group Cohesion)." Journal of Studies on Alcohol 59 (5): 608-618.

While job-related alcohol use may be associated with problems for drinkers, less is known about the effects of employee drinking of coworkers. The authors hypothesized that either exposure to coworker drinking or the presence of a drinking climate would positively correlate with reports of stress and other problems. Following previous research, the authors also predicted that work group cohesion (or team orientation) would buffer against such problems. Two random samples of municipal employees (Ns 909 and 1,068) completed anonymous surveys. These assessed individual drinking, coworker drinking, task-oriented group cohesion, the direct reports of negative consequences due to coworkers substance use, and five problem indicators: job stress, job withdrawal, health problems, work accidents, and absences. In each sample, drinking climate correlated with stress and withdrawal more so often than did reports of individual drinking. Drinking climates and individual job stress were negatively associated with cohesion. ANCOVA results indicated that drinking climate combined with low cohesion resulted in increased vulnerability for all five problems. Moreover, cohesion appeared to attenuate the negative impact of exposure to drinking norms. As many as 40 % of employees report at least one negative consequence associated with coworker substance use (alcohol and drugs). Because teamwork may buffer negative effects of drinking climate on coworkers, workplace prevention efforts might be enhanced through a focus on the social environment. These efforts would include team building and discussions of the impact f coworker drinking on employee productivity.

Cook, R.F., A.S. Back, J. Trudeau, and TM McPherson.2003. "Integrating Substance Abuse Prevention into Health Promotion Programs in the Workplace: A Social Cognitive Intervention Targeting the Mainstream User." In Preventing Workplace Substance Abuses: Beyond Drug Testing to Wellness. J.B. Bennett and W.E.K. Lehman, eds. pp 97-133. Washington D.C: American Psychological Association.

In this chapter, the authors argue for delivering substance abuse prevention in the context of health promotion and report findings from field tests of their programs. In most workplace environments, substance abuse prevention is not part of health promotion, probably because it is assumed that employee assistance programs (EAPs) are addressing this need. But EAPs are treatment oriented, only helping the "walking wounded" who have already been affected by substance use. The authors' rationale for incorporating prevention efforts into health promotion includes the following: substance use is a health hazard; substance use is related to all components of health promotion (stress, weight control, nutrition, exercise and mental health); a major obstacle to employee participation in substance abuse prevention efforts is the stigma; health promotion programs will reach substance users who do not yet have a problem; promoting healthful lifestyles and controlling substance use are mutually reinforcing messages; and health programs were based on cognitive behavioral principles and designed to be transportable (i.e. major elements of the program were presented in print and video). The interventions consisted of three or four brief sessions delivered over lunch or during breaks, totaling 3 hours of less. The

sessions stressed the effects of alcohol consumption on health and the positive image of alcohol presented by the media. Subsequent sessions focused on controlling consumption and positive alternatives to alcohol abuse. Based on controlled field tests, the authors conclude that the substance abuse materials can be incorporated into health promotion programs without diluting the impact of these programs. Stress management programs were the most promising vehicles for workplace substance abuse prevention; nutrition and weight management were less successful. Parenting programs were also useful for substance abuse prevention, in the context of keeping children drug free and addressing adolescent substance abuse.

French, M.T., and G.A. Zarkin. 1998. "Mental Health, Absenteeism and Earnings at a Large Manufacturing Worksite." Journal of Mental Health Policy and Economics. 1:161-172.

Recent studies have examined the relationship between the mental illness and labor market variables. Findings are inconsistent, however, and leave unanswered many questions concerning both the nature and magnitude of the relationship. This study analyzed a worksite-based data set to explore the relationship between symptoms of emotional and psychological problems and employee absenteeism and earnings among employees at a large U.S. worksite. Two measures of absenteeism were combined – days absent during the past 30 days due to sickness or injury and days absent during the past 30 days because the employee did not want to be at work – to create both a dichotomous (i.e. never absent) and a continuous (i.e. number of days absent) absenteeism variable. Annual earnings were measured as personal earnings from the primary job. Various statistical models were tested to determine the independent and joint (with alcohol and illicit drug use) relationship between symptoms of emotional and labor market variables. The analysis consistently finds workers who report symptoms of emotional/psychological problems have higher absenteeism and lower earnings than otherwise similar coworkers. This finding is robust to model specification and to the inclusion of comorbid conditions, such as alcohol and illicit drug use. This study contributes new information to the literature in this area by estimating the effects of emotional/psychological symptoms on two important labor market variables: absenteeism and earnings. Several specifications of the absenteeism and earning equations were estimated to test the independent effect of emotional symptoms and the joint effects of emotional symptoms and other comorbid conditions. Results suggest that employers should consider the productivity losses associated with workers' mental health when designing worksite-based programs such as EAPs. All four measures of emotional symptoms had a positive and statistically significant relationship with personal earnings. These findings were robust across all specifications, even when the effects of other potentially confounding factors (i.e. alcohol and drug use variables) are included. In addition, the number of days intoxicated and cigarette use in the past year appear to be significantly related to earnings even after controlling for emotional symptoms. Finally, the explanatory power of the models is relatively high for cross-sectional data, especially for the earnings regressions. Findings suggest that employers might do well to reassess the priorities of their EAPs and consider directing more of their resources to diagnosing and assisting employees with emotional and psychological distress.

Frone, M.R. 1999. "Work Stress and Alcohol Use." Alcohol Research & Health 23 (4): 285-291.

Employees who drink heavily or who abuse or are dependent on alcohol can undermine a workforce's overall health and productivity. To better understand the reasons behind employee abusive drinking and to develop more effective ways of preventing problem drinking in the workforce, researchers have developed a number of paradigms that guide their research. One such paradigm is the alienation/stress paradigm, which suggests that employee alcohol use may be a direct or indirect response to physical and psychosocial qualities of the work environment. Although in the alcohol literature, work alienation and work stress traditionally have been treated as separate paradigms, compelling reasons support subsuming the work-alienation paradigm under a general work-stress paradigm. Researchers have developed several models to explain the relationship between work stress and alcohol consumption: the simple cause-effect model, the mediation model, the moderation model, and the moderated mediation model. Of these, the moderated mediation model particularly stands out, because it simultaneously addresses the two fundamental issues of how and when work stressors are related to alcohol use. Recent research supports a relation of work-related stressors to elevated alcohol consumption and problem drinking. Future research should focus on the relation between work stressors and alcohol use among adolescents and young adults, because they are just entering the workforce and are the most likely to engage in heavy drinking. Longitudinal studies also are needed to better explain the relation between work stress and alcohol use.

Greenberg, E.S., and L Grundberg. 1995. "Work Alienation and Problem Alcohol Behavior." Journal of Health and Social Behavior. 36 (1): 83-102.

Using a sample of production workers from union, nonunion, producer cooperative, and employee stock ownership plan (ESOP) wood products mills in the Northwest, the authors tested the general proposition that work alienation, defined and low job autonomy, low use of capacities, and lack of participation in decision-making in the workplace, is associated with heavy drinking and negative consequences from drinking. The authors found that the general proposition is supported but that the pathways tend to be indirect rather that direct, mediated by feelings of job satisfaction and respondents' belief about the utility of drinking as a means of coping.

Heirich, M. and C.J. Sieck. 2000. "Worksite Cardiovascular Wellness Programs as a Route to Substance Abuse Prevention." Journal of Occupational and Environmental Medicine. 42(1): 47-56.

This study addresses the question of worksites as an effective route to alcohol abuse prevention. The following hypotheses were tested: (1) cardiovascular disease risk reduction programs provide effective access for alcohol behavior change; (2) proactive outreach and follow-up have more impact on health behavior change than health education classes; (3) ongoing follow-up counseling produces the most behavior change; and (4) screening alone produces little change. The study population included 2,000 employees, recruited through cardiovascular disease health screening,

who were randomly assigned to individual outreach or classes interventions. Changes in the organization of work required more visible outreach, which produced demands for counseling services from any employees who were not in the original group targeted for outreach. After 3 years of intervention, rescreening results strongly supported hypotheses 1 and 2. Spillover effects from counseling produced plant-wide improvements so that hypotheses 3 and 4 were not confirmed. This demonstrates that highly visible outreach provides a cost effective strategy for cardiovascular disease and alcohol prevention.

Snow, D.L., S.C. Swan, and L. Wilton. 2003. "A Workplace Coping-Skills Intervention to Prevent Alcohol Abuse." In Preventing Workplace Substance Abuse: Beyond Drug Testing to Wellness. J.B. Bennett and W.E.K. Lehman, eds., pp.57-96. Washington DC: American Psychological Association.

The authors of this book chapter reported that the prevalence and severity of alcohol problems results in substantial direct and indirect social and economic costs in the workplace. In this chapter, they first present a model, central to prevention research and intervention, that focuses on the identification and modification of key risk and protective factors that influence such health-related behaviors and outcomes as alcohol use and abuse. The authors then summarize research linking selected risk and protective factors to alcohol use, namely work and work-family stressors, social support, and individual coping strategies. They then describe a workplace coping-skills intervention that is based on that model and present findings from two studies that examined the effects of the intervention on employee alcohol use. The authors concluded by discussing lessons learned the suggesting possible directions for future workplace research and intervention strategies.

Trudeau, J.V. D.K. Deitz, and R.F. Cook. 2002. "Utilization and Cost of Behavioral Health Services: Employee Characteristics and Workplace Health Promotion." Journal of Behavioral Health Services and Research. 29 (1): 61-74.

The authors of this article sought to (1) model demographic and employment-related influences on behavioral health care utilization and cost; (2) model behavioral health care utilization and cost influences on general health care cost, job performance, and earnings; and (3) assess workplace-based health promotion's impact on these factors. Behavioral health care utilization was more common in employees who were female, over age 30, with below median earnings or above median general (non-behavioral) health care costs. Among employees utilizing behavioral health care, related costs were higher for employees with below-median earnings. Employees utilizing behavioral health care had higher general health care costs and received lower performance ratings than other employees. Health promotion participants were compared with a non-participant random sample matched on gender, age, and pre-intervention behavioral health care utilization. Among employees without pre-intervention behavioral health care adjusting for pre-intervention costs, participants had higher short-term post-intervention behavioral health care costs than nonparticipants.

Zarkin, G.A., J.W. Bray, G.T. Kruntzos, and B Demilrap. 2001. "The Effect of an Enhanced Employee Assistance Program (EAP) Intervention on EAP Utilization." Journal of Studies on Alcohol. 62 (3): 351-358.

An enhanced employee assistance program (EAP intervention was developed that delivers comprehensive EAP outreach services to all employees who may have alcohol-related and other workplace problems. Standard EAP materials traditionally targeted at White men were enhanced to include women and minorities. This study evaluates whether the enhanced EAP intervention increased EAP utilization. The enhanced EAP intervention was developed at a large community based not for profit EAP located in Rockford, Illinois. Two primary worksites and 16 other newly contracted worksites received the enhanced EAP intervention and served as intervention sites; the other 107 other worksites serviced by the EAP were used as comparison sites. The authors used time series data from 1991 to 1998 ad included repeated measures on each firm's quarterly EAP utilization. The enhanced EAP intervention increased the mean number of women and minority cases per worksite by 58%, White male cases by 45% and total EAP cases by 53%. This study shows that, for a modest cost, the enhanced EAP intervention successfully increased utilization of EAP by all employees, especially utilization by women and minority employees. It also shows that traditional EAP services and outreach materials can be made more appealing to women and minorities without adversely affecting their utilization by White men.

D. Popular Resources Reviewed

Popular sources such as non-peer reviewed articles or reports, online magazines, newsletters and websites were searched using different combinations of key words such as worksite wellness, worksite health promotion and unions. In addition, over 50 union websites, both local and national, were reviewed to see if they included references to wellness or health promotion programs. Health promotion websites were not included that advertised consultants or third party contractors selling their health promotion consulting or benefit services, unless the information seemed unique, credible and useful.

Mochari I. Belt-tightening: Can Coaxing Employees to Live Healthy Lives Help Keep the Bottom Line In Shape? In: CFO.com; 2007

This article discusses what modern corporations are willing to do in their modern corporate wellness programs in order to save money on health care costs, reduce absenteeism and increase productivity. According to the author, some companies are claiming to have earned returns of as much as 300 percent on investments in encouraging healthy living in the workplace, so it is little wonder that so many companies are working on some type of health improvement program, including PepsiCo, IBM and Sears. The problem is that it is difficult to measure the return on investment, and companies that don't see a positive return are reluctant to admit it. Most of the measurement that takes place at all is anecdotal not scientific. "Results can take years to materialize and only affect a small portion of the workplace." Also, more than 50% of health care costs are family members, who don't participate in most

programs. Some programs, however, like pre-natal care, can generate huge savings. The authors quote Dr. James F. Fries of Stanford University: "low-birth weight babies cost $500,000 each. If you can prevent even one or two, that's a huge savings". Other areas that Dr. Fries suggests targeting are: giving employees guidelines on when to see a doctor, encourage self-efficacy, try to reach high risk employees and ones with chronic diseases.

In one case study of a large health care employer, the employer hired a contractor to administer HRAs, which included "health coaches" who counsel employees and develop programs to deal with depression, nutrition, exercise, stress management and chronic health conditions. The employer uses incentives ranging from a free frozen yogurt cone to $100 to employees who complete a program. The program is "scrutinized" annually by senior leadership and they have to show results with good data to get continued funding. One measure was the number of health risks employees had, and the average number dropped from four risks in 1996 to 3.1 risks in 2003. The average cost saving for each employee is $482 - $282 in medical expenses, $75 in reduced absenteeism, and $107 in workers' compensation costs – $5.6 million for the entire company. The program cost $2.3 million annually.

The other problem is that of the employees' privacy - "When does gentle prodding cross the line into intrusion into their personal lives?" Most of the programs are voluntary, but should employees pay more for health care if they are obese? The other issue is confidentiality, although employers have done a good job with this issue.

In Get Healthy - Or Else: Inside One Company's All-Out Attack On Medical Costs. In: Business Week; 2007.

This article discusses one employer's aggressive strategy to keep medical costs down. Scotts Miracle-Gro Company has a wellness program that gives employees who voluntarily participate discounts on their health insurance; those who balk pay an extra $40. A third party contractor looks at individual medical records of employees and cross-references it with insurance claims data. They identify employees who are moderate to high risk, and all of these employees are assigned a health coach who draws up an action plan. Those who don't follow the plan pay an additional $67, on top of the $40. "We tried carrots, carrots didn't work" said the benefits chief for the company. They have had good results, but they have also had a lawsuit from one of the employees that found it intrusive to be told to "quit smoking". While these tactics may be successful in forcing participation, the policies raise many legal issues that will need to be resolved. Meanwhile, the company's stock has gone up 58% since the company launched the program, and many businesses "rush" to wellness programs as one solution to rising health care costs.

Serafini M. Taking Matters Into Their Own Hands. National Journal 2006; 38(39): 36 - 40.

This article discusses the health promotion efforts of several companies including Union Pacific, Safeway and Pitney Bowes. In addition to describing the efforts of these companies to cut health care costs through HP, the author of the article tells us to "Forget Washington" as a remedy to health care cost inflation, at least in the short term, because most business leaders are not lobbying for a major legislative fix

to the health care problem. SEIU's President Andy Stern has been advocating for business leaders to step up and work with labor leaders to fix the country's "broken health care system". But any changes in the national health care system will take time and meanwhile companies need to find ways to keep costs in line. The article includes a summary of a survey 2005 done by Mercer Health and Benefits about health care costs and health promotion strategies:

Cost management strategies for employers over the next five years

	ALL	LARGE
Care management: Wellness programs, chronic illness management	32%	62%
Consumerism: Tax-preferred health savings accounts	34%	55%
Data transparency: Quality and cost data comparing doctors and hospitals	28%	35%
High-performance networks: Cost-efficient physician/hospital networks	26%	33%
Cutting benefits/sharing costs: Higher premiums, deductibles, and co-payments	21%	24%

Percentage of all employers using care management programs

	2004	2005
Behavior-modification programs	9%	16%
Health risk assessments	14%	18%
Disease-management programs	32%	32%

Data-sharing strategies used by large employers (≥ 500 employees) in 2005

Web site on health conditions	69%
Web site on provider quality and cost	49%
Utilization modeling tool to help with plan selection	21%

SOURCE: Mercer National Survey of Employer-Sponsored Health Plans, 2005

Billotti G. Dow Chemical Global Approach to Employee Health Management. In: HERO Think Tank e-newsletter; 2007.

This article discusses the Health Promotion (HP) efforts of Dow Chemical Company, a global corporation with 43,000 employees in over 175 countries. Dow has always had an OSH program and for the last ten years has had a Health Services function that has developed and implemented programs world-wide. In 2004 Dow adopted a global program "Dow Health Strategy" to establish a business case and to ensure a coordinated approach to the delivery of services that go beyond the traditional OSH and HP efforts. The program is data driven, and they use a globally standardized HRA , a standardized questionnaire, a "healthy workplace Index developed to assess the worksite with regards to OSH, a total cost of health analysis. The data is collected annually. Through these efforts Dow has some key learnings about global employee health management.

- Creation of a business case is essential to secure management commitment.
- Determine the total economic impact of all health related costs both direct and indirect
- Have a corporate strategy with a long-term view and commitment
- Set priorities and measures to track outcomes
- Create internal partnerships of related functional groups.

- Implementation strategies should include individuals, small groups and cultural aspects.
- Efforts must align to company priorities or they will not be supported.
- Consider involvement of labor organizations in the strategy and implementation.
- One size does not fit all – you have to be culturally sensitive in the implementation.

Transit Operator Health and Wellness Programs: A Synthesis of Transit Practice. Washington, DC: Transportation Research Board; 2004.

The report is very extensive and discusses the risk factors facing transit operators, such as musculoskeletal disorders (MSDs), stress, violence, smoking, drug and alcohol abuse, fatigue, depression, obesity cardiovascular disease and diabetes. In addition to health and safety concerns for the workers, there are federal regulations that outline physical requirements for drivers to be considered "physically" qualified" to do the work, thus impacting their employability.

The report summarizes the survey results from fourteen transit districts that have "health and wellness" programs gives six case studies of transit district programs. This was a joint union/management effort, the "topic panel" for this report included a Transportation Workers Union Official, and the six case studies included a section on "union support". Apart from its usefulness as a resource for health promotion in this industry, it is also a good example of labor-management cooperation.

Bruck L. Fit For Duty, Fit For Life. In: Responder Safety Online; 2007.

Many of the factors that contribute to firefighter deaths are not only preventable but in the direct control of fire chiefs and fire fighters themselves. This article summarizes a 2006 study on line of duty deaths (LODDs)[1], which compiled data between 2000 and 2005 on LODD cases to analyze factors that contributed to 644 deaths of firefighters. In addition to staffing guidelines and operating guidelines, health and fitness was a frequent factor. This led to a "Call to Action" and a historic partnership between IAFF and the International Association of Fire Chiefs (IAFC) to make health and fitness of uniformed personnel a number one priority. The program focuses on medical, physical and emotional fitness and access to rehabilitation. Each fire department is called open to implement the program, subject to agreement between the union and the members. There are five factors to the program:

1. Mandatory comprehensive annual medical exams
2. Individual fitness schedules (including on duty exercise)
3. Individualized rehabilitation
4. Behavioral health services
5. Data collection and reporting.

There are some barriers to the programs, including costs. One goal of the national program is for the departments to make it a "line item" in the budget, which is a daunting task but essential for long-term sustainability. Another barrier is union/worker

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[1] **Moore-Merrell L, McDonald S, Zhou A, Fisher E, Moore J. Contributing Factors to Firefighter Line-of-Duty Death in the United States: International Union of Firefighters; 2006 September 30, 2006.**

participation due to the fear that the assessments or exams would target personnel for dismissal. This could be addressed by assuring confidentiality and by having a policy that if the examination reveals a problem that could be a safety problem, a re-assignment would be made, not a dismissal.

SHIFT (Safety and Health Involvement for Truck Drivers): Real Work for Real Change [2]

This program is a research project currently underway being done by OHSU department CROET with the support of the Teamsters Union. The study has a website that describes the program: "Shift is a six-month health and safety promotion designed for commercial truck drivers. Long and unusual work hours, prolonged sitting, limited food choices, and demanding work put drivers at risk for serious illness and injury." [3] The program uses "virtual" peer teams to motivate the employees to stay involved in the intervention.

E. Union Websites

As a starting point, the union websites displayed on the Oregon AFL-CIO website page "union links" [4] were reviewed, and only one had anything about wellness/health promotion.[5] Other local and national union websites that weren't listed on the OR AFL-CIO website were also reviewed, including Oregon Nurses Association (ONA), Service Employees International Union (SEIU) 503 and 49, Transport Workers Union of America (TWU), Amalgamated Transit Union (ATU), United Food and Commercial Workers (UFCW), Teamsters, Oregon Education Association (OEA), Oregon School Employees Association (OSEA) and International Association of Fire fighters (IAFF).

Most of the current national union websites had information (usually a link) to health and safety information, but information about health promotion programs or information about resources was not common. [6] Even some of the unions that played a significant role in worksite health promotion/wellness did not mention this on their web page. [7] What follows is a sample of current union websites that focused to some extent on wellness.

Amalgamated Transit Union (ATU) –"Focus on Wellness – No more Excuses" ATU Action Network 6/21/2007

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[2] http://www.ohsushift.com/

[3] The Federal Motor Carrier Safety Agency funded several studies in the late 1990s on driver wellness; the program is called "Get-in-Gear".

[4] http://www.oraflcio.org/cgi-bin/display.cgi?page=UnionLinks site accessed June 2007.

[5] Portland Federation of Teachers and Classified Employees had a link to a Walking Program that the employer offered. http://www.pftce.org/ site accessed June 2007.

[6] Some union websites containing this information were located during the search for on-line resources, but many of them were not current.

[7] This was true for a number of the union websites where the leaders interviewed were involved with the programs and spoke very favorably about them. It many be the lack of information only relates to the websites, we did not look at newsletters that were mailed or information available at the union office.

This was a full-page discussion of why their members need to get healthy, including the federal mandates on blood pressure testing and standards. It suggests strategies to overcoming the common "excuses" for not exercising or eating right. [8]

International Association of Firefighters (IAFF) "Peer Fitness Trainer Certification" IAFF Firefighters Newsletter 6/18/2007
This webpage was linked to the main page and is promoting training for firefighters to become "Peer Fitness" trainers (PFTs) for their worksites. It is part of a joint labor management "Wellness/Fitness Initiative" with the International Association of Fire Chiefs (IAFC) that agrees that to successfully implement the program there must be a "firefighter in each department whom can take the lead."
"Certified PFTs will be essential in helping the IAFF/IAFC Task Force accomplish two of its most fundamental missions:
* Improving fire fighter health, wellness, fitness, safety and performance
* Improving the effectiveness of our fire fighters and every fire department in meeting the needs of the community." [9]

Oregon Nurses Association (ONA) Oregon Hospitals to "Step Up" their New Year's Tobacco Resolutions" Website Article accessed 6/15/2007
This article discusses a partnership between several union hospitals and the Tobacco-Free Coalition of Oregon that is working to: make all hospital campuses tobacco-free, provide tobacco cessation benefits for all hospital employees, help patients quit tobacco, and provide leadership to the local business community to curb tobacco use.[10]

United Food and Commercial Workers (UFCW) Local 1 "Getting Healthy at Laidlaw" Website Article, 3/21/2007
This article describes a wellness program aimed at school bus drivers. It appears to be a program started by one of the members, rather than an employee benefit. "We eat a lot of fast food and are sitting while we work," said Holt. "So I asked myself how I could help our drivers promote better health.[11]

IV. Interview Summary

Ten individuals were interviewed, nine by phone, and one person responded to the questions by email (with a follow-up email exchange). Of the ten, five were either union staff or closely involved with unions. This "union" group consisted of: an administrator at a union-managed health plan for 10,000 workers, a rank and file leader at a building trades union with a Taft-Hartley Health and Welfare fund, a staff representative at a large health care facility, a president of a firefighter local, and an administrator of support program for women in the trades. There were two

[8] http://www.unionvoice.org/atuaction/notice-description.tcl?newsletter_id=7413923
[9] **http://www.iaff.org/HS/PFT/peer_%20index.htm**
[10] www.oregonrn.org
[11] **http://www.ufcwone.com/local_new.php**

management people, one worked for the employee health department of a large unionized health care employer, and another who had managed the health program for a unionized public utility agency. In addition to the management and union interviewees, we interviewed one loss control consultant for a large workers compensation company, and two researchers from different universities in the northwest, one with extensive experience working with unions on safety and health issues and the other currently doing research on a wellness intervention with a unionized workforce.

Some of the questions dealt with the same theme, and the answers can be grouped into that theme. For example the “list of topics” can be merged with first the question about types of programs (and in fact the answers frequently overlapped). Other themes that emerged spontaneously are mentioned.

Types of programs:

All of the programs mentioned by participants were voluntary except one. The firefighter health risk assessment program is mandatory. The unions themselves designed two of the programs; the rest of the programs mentioned by the union representatives had some union participation. This participation differed in level and in how it occurred. In one case the union designed the program and brought it to management after it was “put together”, and now it is a program administered by management, and line item in the city budget. In the other case the union administered the health plan so they controlled the benefits offered. The union with a Taft-Hartley Trust participated as trustees in decision making about what benefits to offer through the trustees, and also promoted the program (although it was not on their website). Another union participated in benefit decisions, including wellness/health promotion programs through a benefits committee whose membership included two unions, physicians, and management representatives. In one case the unions involved had bargained over wellness/health promotion issues such as integrated disability management and employee participation in programs the employer offered to health care plan members. Two interviewees mentioned wellness/health promotion topics being taught in the union apprenticeship programs (including sexual harassment and bullying.)

What interests unions:

Just about every program had a “lifestyle” component. Weight management, smoking cessation, fitness programs were mentioned the most often. One interviewee noted that their employer seemed to avoid the obesity issue, and that there wasn’t “one healthy place to eat on the worksite”, but in general “fitness” and lifestyle issues was a key part of wellness/health promotion programs for most interviewees. Both of the employers and one of union the interviewees described extensive programs in these areas, including onsite fitness centers, one-on-one counseling, and access to weight loss/nutrition programs. One union fitness program was on paid time. Another program has a part-time physical therapist and a registered nurse onsite 24 hours a week to do

early interventions when problems occur, in addition to therapy/rehabilitation, exercise advice and even ergonomic triage and consultation for work spaces. Most mentioned smoking cessation programs, administered through the benefits program. One union partnered with "Tobacco-Free Oregon" to put together focus groups to examine what themes would resonate with the workforce prior to offering the program. One researcher mentioned the BUILT program in the California Bay Area that has been working with building trades unions on smoking cessation for about six years. Another union representative mentioned that the employer offered a smoking cessation program but that the union was not doing any "messaging" yet because of pushback from members who were smokers.

Just about all of the programs mentioned by interviewees had an employee assistance program (EAP) benefit. One union had negotiated a joint drug testing agreement where first offenders were referred to treatment even if they did not self-report. Another had paid time for drug testing. Two of the employers had financial counseling and many of the interviewees mentioned this as a program that they would like to have. Several had stress and work/home balance programs, and this was another program that many of the interviewees felt were necessary. All of the unions and employers had health and safety programs.

In terms of chronic disease management, all but one program had some form of health risk assessment program and many had a counseling component for employees who "wanted to do better" after they saw the results of the tests. One union interviewee said they were just beginning to put together a "disease management" program. The one program that did not have a health assessment program was a new health care benefit program, negotiated in 2004, but the interviewee, who managed the program, supported the concept. One interviewee mentioned a program that used to exist, a "wellness center" near most of the worksites, that was staffed by a nurse practitioner and could be used for preventative care, could monitor chronic illnesses such as diabetes and asthma, and also did first aid and urgent care. The program with a physical therapist and RN also used the RN for first aid, chronic illness monitoring and preventative care. Both thought the programs were very effective and well utilized and popular. The "wellness center" was cut from the budget by the legislature.

One employer had a program on domestic violence, none of the others did. Some expressed an interest in the program others did not. A few of the programs had specific women's' programs.

What Motivates:

Almost everyone interviewed felt that the motivation for employers was saving money, either in health care costs, increased productivity (including reduced sick leave) or workers compensation costs. One person said: "I wish I could say it was because they cared about the workers, some of them do of course but most are motivated by the inflation in health care costs." From two union leaders: "We want to contain costs so that we provide the most healthcare to the most people" and "Contractors work hand in

hand with us on this, it also helps us keep providing a health plan that is completely funded by the employer." Another comment: "I think that the bean counters care about the savings, for me I would rather have my health care money going to prevention." A few mentioned that showing the savings in health care or workers compensation costs was the only way they were able to keep funding for the program. One said that it was the strategy they used to get the employer to "buy-in" to the program. Several mentioned tracking savings to the employer, including sick leave usage, health care utilization rates and improved health assessment outcomes (all in the aggregate.) It was noted that it is difficult to show a direct cost/benefit relationship "it is hard to drill down and show that prevention saved money" and in some cases costs even went up at first because of increased utilization of prevention programs, but everyone interviewed believed that it did save the employer money.

Several noted the need for integrating health and safety and wellness/health promotion programs in order to have any real impact on costs/employee health. One person spoke the issue of musculoskeletal disorders (MSDs): "With MSDs such a large portion of the workers compensation and health and welfare costs are and many MSDs having work and non work etiology there's definitely a potential for reducing costs if both work and lifestyle factors are addressed. But focusing only on lifestyle factors will probably have a limited effect on jobs with real MSD risk factors." This was echoed by another interviewee: "Wellness is linked to prevention of injuries, especially ergonomics. I strongly believe that hazards should be engineered out but there is also a human element, for example, aging. Wellness is part of the equation." Another stated: "Part of our evolution was to move from fitness to health and to realize that prevention is key. Our health plan and safety programs are intentionally integrated. Holistic approach increases productivity, but it was a big change for us, like turning a ship." One person mentioned a past program that tracked utilization data and then did focused "grass roots" prevention programs where there were patterns of a particular problem, such as MSDs or vision problems. The patterns were very apparent in some job types, such as outdoor construction or clerical workers.

The two employers mentioned the "community" relations benefit to having the programs. They sponsored activities in the community such as walks for charity purposes, community health fairs, etc.

All but one of the interviewees felt that wellness/health promotions programs could attract and retain workers if they were attractive enough. Two interviewees gave the example of Intel as an employer that has good programs and policies and an attitude of "work hard but need down time too" that attracts workers, especially younger workers. Another felt that wellness/health promotion programs attracted the older workers who were worried about their health and the younger workers seemed to think they were "bullet-proof". One person stated that people in the trades would be attracted to an employer who had a "good, safe, workplace" and that having wellness programs would add to that. Several mentioned that the working conditions in general had to be good to attract workers. This is especially true in health care.

Barriers

A few people mentioned barriers to employers, such as lack of resources (people or money) or lack of evidence that the programs saved money. Most of the barriers mentioned related to worker participation in the programs. Everyone stated that it was difficult at times to motivate workers to participate in the programs.

Here are a few themes that were mentioned frequently: the people who took advantage of the programs were the ones who didn't need it; hard to get high risk people to participate in programs; people just "didn't want to know" about their health; people didn't have time to participate in fitness programs; it's a vicious cycle – hard to do fitness programs when out of shape, people get discouraged and do nothing and then become more out of shape; it's part of a larger societal issue of lifestyle – bad eating habits and sedentary lifestyles.

One person mentioned that certain workplace cultures don't encourage talk about health or wellness "except when they are talking about the latest surgery they had". There was a stigma attached to these programs, the example was given of a worker doing a stretching program in the shower instead of where he could be seen. The same person mentioned that in some occupations (building trades, trucking) there is a strong "desire for control" (that's why they like that occupation) and people who had this trait are by nature "very resistant to being told to do something".

A union representative felt that employees of health care organizations were resistant to being told about health care issues, "it is like telling teachers about education issues – they think they already know everything."

Another mentioned the smoking issue as a historical example of working conditions vs. individual lifestyles that tended to be divisive among unions and members. "When I got into the field 30 years ago smoking was an untouchable issue in the labor movement, seen as a distraction from cleaning up the workplace. For a lot of reasons including the decline of manufacturing and growth of office work, gender balance in the workforce, societal pressures against tobacco, and recognition of the costs to health plans of smoking, it became impossible to ignore smoking as both a work environment issue and a health promotion issue. There was a big flap in the labor movement in the late 80s or early 90s when OHS folks started getting involved in anti-smoking programs. Some of this was typical labor movement stuff pushed by the Bakery, Confection, Tobacco Workers. [12] At some point lots of people realized that most of their members, like most of the population, were nonsmokers or anti-smokers, and it became an untenable position to cling to smoking as a non-issue compared to workplace conditions."

Trust is another issue that was mentioned by different participants on both the employer and union side. Several people mentioned the importance of emphasizing

[12] This union represented workers in the tobacco industry.

confidentiality and the fear that management would use the information against the worker. One person mentioned that it was common in their industry for the third party person doing health assessments to tell the employer if someone was “unfit for duty.” His union would not agree to any assessment program unless the employer did not see the individual information, and the program in place gives this guarantee -“even if the assessment says you will drop dead tomorrow, the only person who sees it is the doctor and the employee.” According to the interviewee this level of confidentiality is unusual in the industry.

Another trust issue mentioned was in terms of the EAP program. One person felt that the EAP was under-utilized because there was a stigma attached to using the benefit and that workers also believed that management had access to the names of who used the program (they did not).

Another area where trust is an issue is with the issue of integrating OSH and Wellness. One person mentioned that some union health and safety experts had some fear that these integration efforts will become another “blame the worker” approach instead of the employer concentrating on fixing hazards in the workplace. “I think there will continue to be a lot of suspicion of health promotion among unions until employers demonstrate that they really are integrating it with OSH.” This person also mentioned that the term “wellness” was not well-liked among union OSH people, health promotion was the preferred term, he added that many union OSH people and progressive HR people see the importance of integration, especially with an aging workforce.

One employer that had a “walking” program mentioned that everyone signed up at first, but after a month or two there was fall off. Several mentioned the need to have employees involved in picking the types of programs. Two mentioned the importance of having lots of different programs to appeal to lots of different people.

Some of the strategies for increasing participation and other strategies for success in wellness/health promotion programs:

- Including the employees in the plan design

- Using evidenced based data on effective methods of intervention. One of the researchers discussed motivational interviewing, using self-identified goals and peer-led teams as recent models that have had good outcomes. Several mentioned peer-led programs being effective.

- Having a person dedicated to administering the program, not just put onto someone else’s duties

- Budget for evidenced-based evaluation to track costs/benefits.

- Paid time for fitness activities, counseling and health assessments, and other incentives such as free or discounted membership in gyms or programs like weight-watchers.

- Integrating OSH, wellness/health promotion, and disability management to create a program that is designed to keep the workplace as healthy as possible.

- Having wellness training in apprenticeship programs, linking it to hazards on the job (i.e. chemical exposure risks and smoking, obesity and MSDs.) Other types of industry could offer training on work time.

V. Discussion and Recommendations

While some unions play a significant role in health promotion among their members, it is clear that many do not. The reasons for this disconnect are varied, and include lack of resources and capacity to participate in the programs, lack of time, other priorities, lack of interest or even opposition to the programs from their members. In general, unions are interested in issues that their members are interested in, so if the members aren't pushing for these programs, then the union will spend their very limited time elsewhere. Even when the programs are funded and there are outside consultants to help build capacity time is an issue for most union staff.

The desire to lower health care costs has motivated many unions to at least support the programs, although much more could be done to promote the programs, at least through their websites. In some industries such as trucking or health care federal mandates for certain programs like drug testing and blood pressure testing (bus drivers) mean that the union is probably involved in bargaining over these issues, and more likely to promote prevention efforts. Some unions have such high levels of health problems (for example, firefighters and transit operators) that they have become involved at a national level.

Most unions have been very interested and are proactively involved in issues that impact worker safety, and as health promotion becomes integrated with OSH more unions will probably become proactive with health promotion. Unions that have workers in industries where it is hard to recruit and retain workers (health care, for example) have a very real interest in keeping their workforce safe and healthy. That being said, some unions have let the employer "take over" this issue and have diverted resources to other priorities, unless there is a "burning" issue for members that they can organize around. Educating members and raising their awareness about hazards and possible solutions could help with this lack of interest.

Why bother? Why not just work with the employers? Clearly, there is an advantage to involving unions in health promotion efforts. The literature and the interview data show that unions could be a vehicle to access hard to reach and high-risk workers, such as home care and child care workers and blue-collar workers in construction. Unions have helped to overcome some of the barriers to participation in health promotion programs

by promoting them and by collaborating with researchers about the most effective methods for intervention and what messages resonate with their members. In some cases just having the union "stamp" of approval was enough to improve participation, as the project with the Laborers Union demonstrated. This could be extremely important in some industries, even if the union doesn't do anything else. For example, union density for firefighters nationally is about 69%, and in some states it is much higher – 90% in Washington. Not having the union blessing would probably be a mistake. Even if the industry is not highly unionized, if the employer is unionized they should be considered a stakeholder, even if the employer (or researcher) doesn't particularly embrace the union presence.

One interesting fact that came out of this research was the need for sharing between groups that seem to have common interests. For example, some of the work being done by researchers on effective workplace health promotion interventions had not been disseminated among the unions that represented workers in the industry. The firefighter union leader interviewed was not familiar with the PHLAME program, even though it was a local program that claimed to have participants in his geographical area. The person interviewed from a large health care employer did not mention the research done by this institution on health promotion, even though the members of the union he worked for were the group studied. There is also a "disconnect" between the different research disciplines not everyone goes to the same conferences, reads or publishes in the same types of journals, or looks at practices outside their field. Perhaps integration of OSH and health promotion will help bridge this informational gap, but there also needs to be an effort among all of the stakeholders to disseminate information in such a way that is actually useful to laypeople and people outside of their discipline. Of course the union staff then have to make the time to read them.

Employers should include the unions, and build trust by dealing with working conditions that impact worker health and safety, provide incentives to workers to participate in programs and budget for evaluation of programs. This also could be a mechanism to ensure that programs do not "blame the victim" and are more appropriate work-related programs.

Researchers should put work into useable information and develop relationships with union staff. This would help them be aware of the union culture and issues surrounding health promotion in the workplace. One researcher commented, "All I get from the union is a letter of support, that is about their only involvement." Ironically, during the same week, a union person (not one of the interviewees) who was approached on a different project for a letter of support commented, "It seems all they want is the letter of support, they don't have any interest in what we want out of this. If they want us to participate or give support then we have to get our needs met too." Obviously there is a need to open these communication channels both ways. Unions can do more to be a pro-active partner and to promote programs that they prioritize (this is another capacity issue – someone has to write the article, update the website, develop materials). Some unions have worked with academics to do research that are important to their members, more unions should consider this as a way to build capacity.

Unions can and should play a role in health promotion programs that affect their workers. More research needs to be done on the most effective ways to engage unions as partners in a comprehensive health promotion efforts at the worksite that include both workplace and personal factors.

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Appendix A. Interview questions

(1) What are current practices of your union/employer or *(that you are aware of in workplaces or as a union program*) with regard to participation in wellness programs (*both locally and nationally*)?
(2) Here are some topic areas, can you tell me if your union (employer) has programs in this area and what the level of interest your union has in these programs.
    a. Lifestyle (obesity, fitness, nutrition) programs
    b. Chronic illness prevention other than lifestyle programs (early detection programs, testing at "wellness fairs", education)
    c. Stress reduction and Balancing family/work/other activities
    d. Dealing with bullying, domestic violence
    e. Programs specific to women's health
    f. Programs aimed at decreasing workplace injuries and illness
    g. Programs aimed at preventing and dealing with substance abuse
    h. Other programs that the union/employer participates in or that you would be interested in?
(3) What motivates your union/employer (*workplace*) to participate or not participate in these programs?
(4) What barriers exist?
(5) Why do you think workers participate or don't participate in these programs?
(6) If you participate in a wellness program, how long has the program been in place and has it evolved over time?
(7) What has your union learned from the experience?
(8) Do you see wellness programs as a way to attract/retain workers in your industry?
(9) Do you see wellness programs as a way to contain healthcare/workers compensation costs?