

Running Head: EMPLOYEE HEALTH AND WELLNESS

Employee Health and Wellness:

It's Everyone's Business

Kelly McNabb

0015638

Anne Ostrom

MPH Project Proposal

ProQuest Number: 10611541

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10611541

Published by ProQuest LLC (2017). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code Microform Edition © ProQuest LLC.

ProQuest LLC. 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346

Mission

"To create a workplace environment which encourages employees to incorporate physical activity into their daily routine and which values active living as an essential part of both, personal and corporate well-being" (Public Health Agency of Canada, n.d.).

Table of Contents

Mission Statement	2
Abstract	4
Introduction	5
The Benefits of Physical Activity	6
Principles to Guide Program Development	9
Measurement, Outcomes and Evaluation	12
Conclusion	14
References	15
Appendix A – Workplace Health Impacts	22
Appendix B – Sample Physical Activity Program Manual for Employers	29

Abstract

The Thunder Bay District Health Unit promotes the concept of comprehensive workplace health promotion to workplaces of varying sizes throughout the district. This project contains two documents for the employer. The first document provides a review of the current literature focusing on updated facts and statistics pertaining to the benefits of promoting physical activity in the workplace and aims to improve an employers' knowledge and interest in initiating active living at work. The second document is a sample manual, which aims to assist the employer to implement physical activity programs and policies within the workplace.

One of the major health challenges for Canada in recent years has been the steady rise in the prevalence of chronic diseases (Haydon, Roerecke, Giesbrecht, Rehm & Kobus-Matthews, 2006). Cardiovascular disease, cancer and respiratory disease accounted for the majority of deaths in Ontario from 2000-2004 (Statistics Canada, 2007). Unfortunately, the high prevalence rate of major risk factors such as smoking, physical inactivity, high blood pressure, obesity and diabetes continue to contribute to this epidemic (Tanuseputo, Manuel, Leung, Nguyen & Johansen, 2003). Even more unfortunate, is the segment of the population most affected by chronic disease in Canada are those aged 20-55 (Statistics Canada, 2006). Since this age group represents the majority of the adult working population (Public Health Agency of Canada [PHAC], n.d.), targeting workplace environments for health promotion initiatives makes sense for both humanitarian and business reasons. Targeting the workplace enables the employer to influence a large number of people at one time and ensures an opportunity for return on investment (Cameron & Craig, 2004; Goetzel, Ozminkowski, Bruno, Rutter, Isaac, & Wang, 2002; McMurray, 1999; Ozminkowski, Ling, Goetzel, Bruno, Rutter, Isaac, Wang, 2002). Improved productivity, fewer insurance and worker compensation claims and less absenteeism are only a few of the obvious benefits of engaging in workplace health promotion (Berger, Murray, Xu & Pauly, 2001; Berger, Howell, Nicholson & Sharda, 2003; Boyles, Pelletier & Lynch 2004; Burton, Pransky, Conti, Chen & Edington, 2004; Cawley, Rizzo & Haas, 2007; Goetzel, Long, Ozminkowski, Hawkins, Wang, & Lynch, 2004; Goetzel, Hawkins, Ozminkowski & Wang, 2003; Mayne, Howard, & Brandt-Rauf, 2004; Sullivan, 2004). Goetzel, Ozminkowski, Baase, & Billotti (2005), were able to correlate some less obvious benefits of promoting health in the

workplace such as reduced staff turnover, improved employee attitudes towards the organization and improved employee morale. Reducing staff turnover contributed to lowering the costs related to recruitment, training and orientation and improved employee morale, contributed to an increased ability of employees to cope with workplace changes (Goetzel et al., 2005).

The Benefits of Physical Activity

As mentioned above, wellness programs instituted in the workplace can become valuable disease management tools allowing employers an opportunity to affect the health and wellbeing of employees in various ways. There is a multitude of scientific evidence available, which demonstrates that physical activity is an effective way to decrease the risks of developing a chronic disease (Aldana, Barlow, Smith, Yanowitz, Adams, Loveday & Merrill, 2006; Brunet, Plotnikoff, Raine & Courneya, 2005; Coats, 2005; Katzmarzyk, Gledhill, & Shephard, 2000; Knowler, Barrett-Connor, Fowler, Hamman, Lachin, Walker & Nathan, 2002; Kosaka, Noda & Kuzuya, 2005; Stewart, Bacher, Turner, Fleg, Hees, Shapiro, Tayback & Ouyang, 2005). Incorporating physical activity as part of an employee wellness program is not only an effective way to improve employee health, but it is also an effective way to protect one's business interests. This is especially true for those conditions that result in substantial direct and/or indirect costs to the company (Aldana, et al., 2005, Aldana, Greenlaw, Diehl, Salberg, Merrill, & Ohmine, 2006; Gates, Succop, Brehm, Gillespie & Sommers 2008; Golaszewski, 2001; Hughes, Girolami, Cheadle, Harris & Patrick, 2007).

A number of studies provide evidence of lower medical and insurance costs for employees in health promotion programs, particularly programs involving physical

activity. Pacific Bell's FitWorks participants claimed \$300 less per case for a one-year savings of \$700,000 (The Health Project, n.d.). Coca Cola reported a reduction in health care claims with their exercise program, saving \$500 per employee per year for those who joined their Health Works fitness program (Wellness Councils of America, 1995). With the implementation of a fitness based worksite wellness program, Prudential Insurance Company also reported a reduction in participant's major medical costs from \$574 to \$312 over the course of one year (Public Health Agency of Canada [PHAC], n.d.).

Current evidence has shown a significant reduction in absenteeism and resultant dollars saved due to the implementation of employee fitness programs. Pacific Bell's FitWorks program decreased absent days by 0.8 percent, to save \$2 million in one year and its members also spent 3.3 days less on short-term disability for an additional savings of \$4.7 million (The Health Project, n.d.). A two-year study by the DuPont Corporation on the effect of its comprehensive health promotion program on absenteeism among workers, reported a 14 percent decline in disability days, versus 5.8 percent decline for controls. This resulted in a total of 11,726 fewer net disability days.

A number of employers, who recognized physical activity as an important component to their health promotion programs, reported improvement in job attitude, work performance, energy level, and/or overall morale among employees who participated, which are all critical factors in enhancing productivity. For example, Canada Life Assurance Company observed a 4 percent increase in productivity among employees after engaging in the company's fitness program. Employees also reported feeling more alert, having better rapport with their coworkers, and generally enjoying their work more

(Shepard, 1983). Interviews conducted with employees from the Vancouver International Airport Authority, Seven Oaks General Hospital, and Moose Jaw-Thunder Creek Health District after implementation of their wellness programs reflected the view that the workplace health initiatives had contributed to improved workplace morale, greater company loyalty, and stronger social relationships among workers (Canadian Labour and Business Centre [CLBC], 2002).

There is a number of employer driven studies to suggest that workplace health promotion programs are successful in reducing personal health risk factors and associated medical costs, which can contribute to lost revenue for the employer (see Appendix A). While Canadian research in this area is limited, it has been estimated that for every dollar spent on supporting and improving employee health, there is a \$4 to \$8 return on investment. In the online resource, 'Active Living at Work', the Public Health Agency of Canada (PHAC), (n.d.), reported results of employer based studies, which indicated a positive return on investment when employees engaged in physical activity as part of an employee wellness program. Municipal employees in Toronto missed 3.35 fewer days in the first six months of participating in the employee fitness program, than those that did not participate. British Columbia Hydro found that employee turnover for those enrolled in the company's fitness program was only 3.5 percent, compared with a company average of 10.3 percent. Similarly, Canada Life Assurance Company found that employee turnover for those enrolled in the company's fitness program was 1.5 percent, versus 15 percent for non-participants. This evidence continues to support the notion that physical fitness is a valuable disease management tool for employers in the pursuit of

protecting their return on investment (Lee, Blair & Jackson 1999; Rosengren, 1997; Kupersmith, Holmes-Rovner, Hogan, Rovner & Gardiner, 1995).

Principles to Guide Program Development

In the past, employers focused on creating healthy workplaces through providing a safe and comfortable work environment, with the anticipated result of preventing injury. Although these traditional methods have proved to be advantageous, continued research has shown that workplace health promotion programs, when provided in a comprehensive and integrated manner, can be more effective in maintaining and improving workplace health (Shain & Suurvali, 2001). A comprehensive approach can mean that a variety of lifestyle issues are being targeted for change (i.e., increasing physical activity level, smoking cessation) or that a variety of strategies are being used (i.e., raising awareness, building skills). Comprehensive Workplace Health Promotion (CWHP) is defined as "an approach to protecting and enhancing the health of employees that relies and builds upon the efforts of employers to create a supportive management under and upon the efforts of employees to care for their own well-being" (Shain & Suurvali, 2001, p. 5). Shain & Suurvali (2001) have identified specific characteristics, which equate to the success of a program and combine "program content and design" (p. 18) with "environmental or contextual prerequisites" (p. 20).

The most important aspects of program content and design for an employer to consider when developing their program are a person's readiness to change, the availability of one's social supports, how other health practices reinforce the behavior one is attempting to change, whether the program is appealing to the population that it is attempting to service and whether or not the program and its requirements are easily

accessible (Shain & Suurvali, 2001).

Past research indicates that an individual's position within the change process has a profound effect on behavior modification outcomes (Woods, Mutrie & Scott, 2000; Marcus, Emmons & Simkin-Silverman, 1998; Marcus, Simkin, Rossi & Pinto, 1996; Marcus, Banspach, Lefebvre, Rossi, Carleton & Abrams, 1992; Marcus & Owen, 1992; Marcus, Rossi, Shelby, Niaura & Abrams, 1992). The Transtheoretical Model of Health Behavior Change (Prochaska & Velicer, 1997) is a theoretical model, which has been conceptualized as a six-stage process or continuum related to a person's readiness to change. The six stages are pre-contemplation, contemplation, preparation, action, maintenance and termination. People are thought to progress through these stages at varying rates, often moving back and forth along the continuum a number of times before attaining the final stage of termination. In this model, people use different processes of change as they move from one stage of change to another. Efficient self-change thus depends on doing the right thing (processes) at the right time (stages). According to this theory, tailoring interventions to match a person's readiness or stage of change is essential (Ronda, Van Assema & Brug, 2001, p. 306). For example, in the pre-contemplation stage individuals are not focused on changing their physical activity level, therefore, the focus should be tailored to strategies that increase the individual's awareness of personal risk behavior, in order for them to proceed from pre-contemplation to contemplating behavior change. This can be achieved through a variety of education and skill-building activities, as well as self-evaluation. Likewise, in the action stage, individuals have already started to exercise more, therefore, the focus should be tailored to strategies that encourage and support the continuation of their physical activity levels. This can be achieved by

reinforcing the individuals' knowledge of the benefits of physical activity on long-term health outcomes and by assisting them in removing any ongoing identified barriers (Lowther, Mutrie & Scott, 2007).

Social support is another factor that is important to consider when developing a successful health promotion program in relation to program content and design. One strategy that continues to recur in the literature to motivate individuals toward participating in physical activity and maintain their activity level is the "buddy system" (Shain & Suurvali, 2001, 18). Research by Stutts (2002), on the determinants of physical activity in adults, reveals that "vicarious experience or modeling" (p. 506) can be an effective way to increase an individual's perception of their ability to succeed in change. By pairing individuals of lower physical ability and knowledge with those of higher physical ability and knowledge the employer is able to incorporate social support for the individual into their physical activity program.

Awareness of the interrelated nature of personal health practices (i.e., sleep patterns can have an affect on physical activity patterns) and how they can positively or negatively affect outcomes is another important aspect of program content and design for an employer to consider when developing their program. This information is important in order to be able to tailor the design of the program to meet the needs of its participants. Ensuring that programs are designed to meet the preferences, aptitudes and requirements of a wide variety of participants, taking into account variations in life stage, education, culture and language capacity, will ensure that the program appeals to a larger number of employees.

Finally, 'convenience' has increasingly become a factor that employers must

consider when building a health promotion program for success. By offering financial resources or implementing attractive on-site options for employees, employers can provide a more accessible opportunity to engage in healthy behaviors.

Environmental or contextual prerequisites include management support and a supportive management climate. It is essential that the workplace environment be supportive of an employee's efforts to manage their health (Shain & Suurvali, 2001). For example, encouraging and allowing an individual to set one's own goals and to identify the supports one will need to achieve success, is much more likely to lead to a successful program and cost-effective outcomes, especially if management is also modeling healthy behaviours. Maintaining reasonable workload expectations, maximizing the degree to which an employee is able to participate in the administration of their work and providing recognition for an employee's achievements are all ways in which an employer can reinforce a supportive management climate (Shain & Suurvali, 2001).

Measurement, Outcomes and Evaluation

Monitoring and evaluating any program is an important part of ensuring successful results. Being accountable for how a program is developing, allows one to learn from one's mistakes and to make changes as required, while enhancing everyone's chance for continued success. In Ontario, there have been numerous resources developed to assist with health program evaluation. In October 1994, the *Program Evaluation Work Group* (Baxter, et al., 1996) was assigned the task of studying program evaluation in local health units in Ontario. The result was to develop guiding principles to evaluate public health programs and to develop a common educational resource for program evaluation. The Work Group published its recommendations in the Public Health & Epidemiology Report

Ontario (PHERO) on May 31, 1996, in an article entitled, An Agenda to Enhance Program Evaluation in Public Health. In response to the second recommendation, the Program Evaluation Tool Kit was developed. The Program Evaluation Tool Kit is a practical step-by-step guide to evaluating programs. It is presented in a series of short modules, with simple explanations and specific tools for planning, conducting and using evaluation. Nancy Porteous, Barbara Sheldrick and Paula Stewart developed the Program Evaluation Tool Kit in 1997 with funding from the Ottawa-Carleton Health Department's Public Health Research, Education and Development Program and the Public Health Branch of the Ontario Ministry of Health. Although the Program Evaluation Tool Kit was originally developed to specifically evaluate public health programs, it has been designed in a manner that allows even an unskilled individual in health program evaluation to utilize it. It provides the necessary introductory information to those engaging in program evaluation for the first time. According to Porteous, Sheldrick & Stewart (1997), the two main stages in program development are planning and implementation. Different decision-making needs during these stages determine the type of evaluation to be conducted. During the program planning stage, it is important for employers to determine whether a program should be implemented and what type of program is required. The employer can achieve this evaluation activity by performing a needs assessment. Once the needs of the employees have been established, an employer is better able to determine what aspects of the program will be feasible. During the early stages of program implementation, it is important for the employer to determine how the program is operating and to whom the program is servicing. By engaging in process evaluation, an employer is able to determine whether implementation is consistent with

the way the program was planned and how the program can be improved. Once a program is established and early evaluation activities have indicated that implementation has been successful, it is important for the employer to assess the impact of the program. Through conducting an outcome evaluation, the employer is able to examine the changes that have occurred as a result of the program. The most important aspect to remember is that evaluation is an integral part of program management and should occur during all phases of a program (Porteous et al., 1997).

Conclusion

There is compelling evidence that suggests that the majority of health-related costs within the Canadian health care system are preventable through active participation in health promotion programs. Declining physical activity rates within the adult population across the country has amplified obesity rates, which is one of the precursors to chronic disease. With a large portion of the Canadian adult population spending the majority of their waking hours at work, places of employment have been identified as the optimal environment for implementing health promotion programs. Not only is there benefit through implementing health promotion in the workplace for the employee, there is also benefit for the employer. Well-planned, comprehensive health promotion programs have been shown to be cost- effective, especially when the health promotion programming is matched to the health problems of the specific employee population. Lastly, when a comprehensive approach to developing one's health promotion program is used, there is a better chance of success for both those participating in the program as well as those implementing the program.

References

- Aldana, S., Barlow, M., Smith, R., Yanowitz, F., Adams, T., Loveday, L., & Merrill,
 R.M. (2006). A worksite diabetes prevention program: Two-year impact on
 employee health. American Association of Occupational Health Nursing Journal,
 54(9), 389-395.
- Aldana, S.G., Greenlaw, R.L., Diehl, H.A., Salberg, A., Merrill. R.M., & Ohmine, S. (2005). The effects of a worksite chronic disease prevention program. *Journal of Occupational and Environmental Medicine*, 47(6), 558-564.
- Baxter, D., Brown, H., Davison, B., Denis, R., Dwyer, J., Holowaty, P., et al. (1996). An agenda to enhance program evaluation in public health. *Public Health and Epidemiology Report Ontario*, 8(3).
- Berger, M.L., Murray, J.F., Xu, J. & Pauly, M. (2001). Alternative valuations of work loss and productivity. *Journal of Occupational and Environmental Medicine*; 43(1), 18-24.
- Berger, M.L., Howell, R., Nicholson, S., & Sharda, C. (2003). Investing in healthy human capital. *Journal of Occupational and Environmental Medicine*, 45(12), 1213-1225.
- Biddle, S., Goudas, M., & Page, A. (1994). Social-psychological predictors of self-reported actual and intended physical activity in a university workforce sample.

 British Journal of Sports Medicine, 28(3), 160-163.
- Boyles, M., Pelletier, B. & Lynch, W. (2004). The relationship between health risks and work productivity. *Journal of Occupational and Environmental Medicine*, 46(7), 737-745.

- Brunet, S., Plotnikoff, R., Raine, K., & Courneya, K. (2005). For the patient: Exercise is important to controlling type 2 diabetes. Ethnicity & Disease, 15(2), 353-354.
- Burton, W.N., Pransky, G., Conti, D.J., Chen, C., & Edington, D.W. (2004). The association of medical conditions and presenteeism. *Journal of Occupational and Environmental Medicine*, 46(6 suppl), S38-S45.
- Canadian Labour and Business centre [CLBC]. (2002, November). Twelve case studies on innovative workplace health initiatives: summary of key conclusions. Retrieved October 10, 2007, from http://www.clbc.ca/Research and Reports/Archive/report03240302.asp
- Cawley, J., Rizzo, J.A., & Haas, K. (2007). Occupation-specific absenteeism costs associated with obesity and morbid obesity. *Journal of Occupational and Environmental Medicine*, 49(12), 1317-1324.
- Coats, J. (2005). Advances in the non-drug, non-surgical, non-device management of CHF. International Journal of Cardiology, 100(1), 1-4.
- Desmond, A. W., Conrad, K. M., Montgomery, A., & Simon, K. A. (1993). Factors associated with male workers' engagement in physical activity. *American Association of Occupational Health Nursing Journal*, 41(2), 73-83.
- Duffy, M. E., Rossow, R., & Hernandez, M. (1996). Correlates of health-promotion activities in employed Mexican American women. *Nursing Research*, 45(1), 18-25.
- Gates, D.M., Succop, P., Brehm, B.J., Gillespie, G.L., & Sommers, B.D. (2008).

 Obesity and presenteeism: The impact of body mass index on workplace productivity. *Journal of Occupational and Environmental Medicine*, 50(1), 39-45.

- Goetzel, R.Z., Hawkins, K., Ozminkowski, R.J., & Wang, S. (2003). The health and productivity cost burden of the "top 10" physical and mental health conditions affecting six large U.S. employers in 1999. *Journal of Occupational and Environmental Medicine*, 45(1), 5-14.
- Goetzel, R.Z., Long, S.R., Ozminkowski, R.J., Hawkins, K., Wang, S., & Lynch, W. (2004). Health, absence, disability, and presenteeism cost estimates of certain physical and mental health conditions affecting U.S. employers. *Journal of Occupational and Environmental Medicine*, 46(4), 398-412.
- Goetzel, R.Z., Ozminkowski, R.J., Baase, C.M., & Billotti, G.M. (2005). Estimating the return-on-investment from changes in employee health risks on the Dow Chemical company's health care costs. *Journal of Occupational and Environmental Medicine*, 47(8), 759-768.
- Goetzel, R.Z., Ozminkowski, R.J., Bruno, J.A., Rutter, K.R., Isaac, F., & Wang, S. (2002). The long-term impact of Johnson & Johnson's health & wellness program on employee health risks. *Journal of Occupational and Environmental Medicine*, 44(5), 417-424.
- Golaszewski, T. (2001). Shining lights: studies that have most influenced the understanding of health promotion's financial impact. *American Journal of Health Promotion*, 15(5), 332-340.
- Haydon, E., Roerecke, M., Giesbrecht, N., Rehm, J., & Kobus-Matthews, M. (March 2006). Chronic Disease in Ontario and Canada: Determinants, Risk Factors and Prevention Priorities. Retrieved October 10, 2007, from http://www.ocdpa.on.ca/docs/CDP-SummaryReport-Mar06.pdf

- Hughes, M.C., Girolami, T.M., Cheadle, A.D., Harris, J.R., & Patrick, D.L. (2007). A lifestyle-based weight management program delivered to employees: Examination of health and economic outcomes. *Journal of Occupational and Environmental Medicine*, 49(11), 1212-1217.
- Katzmarzyk, P. T., Gledhill, N. & Shephard, R. (2000). The economic burden of physical inactivity in Canada. *Canadian Medical Association Journal*, 163, 1435-1440.
- Knowler, W. C., Barrett-Connor, E., Fowler, S. E., Hamman, R. F., Lachin, J. M.,
 Walker, E. A. & Nathan, D.M., (2002). Reduction in the incidence of type 2
 diabetes with lifestyle intervention or metformin. New England Journal of
 Medicine, 346(6), 393-403.
- Kosaka, K., Noda, M., & Kuzuya, T. (2005). Prevention of type 2 diabetes by lifestyle intervention: A Japanese trial in IGT males. *Diabetes Research and Clinical Practice*, 67(2), 152-162.
- Kupersmith, J., Holmes-Rovner, M., Hogan, A., Rovner, D. & Gardiner, J. (1995). Cost-effectiveness analysis in heart disease, part II: preventative therapies. *Progress in Cardiovascular Disease*, (37), 243-71.
- Lee, C.D., Blair, S.N., & Jackson, A.S. (1999). Cardiorespiratory fitness, body composition and all-cause and cardiovascular disease mortality in men. *American Journal of Clinical Nutrition*, 69, p. 373-80.
- Lowther, M., Mutrie, N., & Scott, E. M. (2007). Identifying key processes of exercise behaviour change associated with movement through the stages of exercise behaviour change. *Journal of Health Psychology*, 12, (2), 261-272.

- Marcus, B. H., Banspach, S. W., Lefebvre, R. C., Rossi, J. S., Carleton, R. A., & Abrams,
 D. B. (1992). Using the stage of change model to increase the adoption of physical activity among community participants. *American Journal of Health Promotion*, 6, 424–429.
- Marcus, B. H., Emmons, K. M., & Simkin-Silverman, L. R. (1998). Evaluation of motivationally tailored verses standard self-help physical activity interventions at the workplace. *American Journal of Health Promotion*, 12, 246–253.
- Marcus, B. H., & Owen, N. (1992). Motivational readiness, self-efficacy and decision-making for exercise. *Journal of Applied Social Psychology*, 22, 3–16.
- Marcus, B. H., Rossi, J. S., Selby, V. C., Niaura, R. S., & Abrams, D. B. (1992). The stages and processes of exercise adoption and maintenance in a worksite sample. Health Psychology, 11, 386–395.
- Marcus, B. H., Simkin, L. R., Rossi, J. S., & Pinto, B. M. (1996). Longitudinal shifts in employees' stages and processes of exercise behaviour change. *American Journal of Health Promotion*, 10, 195–200.
- Mayne, T.J., Howard, K., & Brandt-Rauf., P.W. (2004). Measuring and evaluating the effects of disease on workplace productivity. *Journal of Occupational and Environmental Medicine*, 46(6 suppl), S1-S2.
- McMurray, A. (1999). Community health and wellness: A socioecological approach.

 Artarmon, NSW: Mosby.
- Ozminkowski, R.J., Ling, D., Goetzel, R.Z., Bruno, J.A., Rutter, K.A., Isaac, F., & Wang, S. (2002). Long-term impact of Johnson & Johnson's health & wellness program on health care utilization and expenditures. *Journal of Occupational and*

- Environmental Medicine, 44(1), 21-29.
- Pender, N. J., Walker, S. N., Sechrist, K. R., & Frank-Stromborg, M. (1990). Predicting health-promoting lifestyles in the workplace. *Nursing Research*, 39(6), 326-332.
- Piazza, J., Conrad, K., & Wilbur, J. (2001). Exercise behavior among female occupational health nurses. *American Association of Occupational Health Nurses Journal*, 49(2), 79-86.
- Porteous, N.L., Sheldrick, B.J., & Stewart, P.J. (1997). Guiding principles for program evaluation in Ontario Health Units. *Public Health & Epidemiology Report Ontario*, 8(3), 42–44.
- Prochaska, J. O., & Velicer, W. F. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion*, 12(1), 38-48.
- Public Health Agency of Canada. (n.d.). The business case for active living at work return on investment. Retrieved October 10, 2007, from http://www.phac-aspc.gc.ca/pau-uap/fitness/work/trends-e.html
- Rabinowitz, S., Melamed, S., Weisberg, E., Tal, D., & Ribak, J. (1992). Personal determinants of leisure-time exercise activities. *Perceptual and Motor Skills*, 75(3 Part 1), 779-784.
- Ronda, G., Van Assesma, P., & Brug, J. (2001). Stages of change, psychological factors and awareness of physical activity levels in the Netherlands. *Health Promotion International*, 16 (4), 305-314.
- Rosengren, A., & Wilhelmsen L. (1997). Physical activity protects against coronary death

- and deaths from all causes in middle-aged men: evidence from a 20-year followup of the Primary Prevention Study in Gateborg. *Annals of Epidemiology*, 7, 69-75.
- Shain, M., & Suurvali, H., (2001). Investing in comprehensive workplace health promotion. Toronto: Centre for Addiction and Mental Health.
- Shepard, R. (1983). Employee health and fitness: The state of the art (Canadian employee fitness and lifestyle project). *Journal of Preventative Medicine*, 12, 644-653.
- Statistics Canada. (2006). How healthy are Canadians? *Health Reports*, 16 (Suppl. To Volume 16), 1-67.
- Statistics Canada. (2007). *Mortality, Summary List of Causes* (ISSN 1701-2023). Ottawa, ON: Author.
- Stewart, K., Bacher, A., Turner, K., Fleg, J., Hees, P., Shapiro, E., et al. (2005).

 Effect of exercise on blood pressure in older persons: A randomized controlled trial. Archives of Internal Medicine, 165(7), 756-762.
- Sullivan, S. (2004). Making the business case for health and productivity management.

 Journal of Occupational and Environmental Medicine, 46(6), S56-S61.
- Tanuseputo, P., Manuel, D.G., Leung, M., K., Nguyen & H., Johansen, (2003). Risk factors for cardiovascular disease in Canada. *Canadian Journal of Cardiology*, 19 (11), 1249-1259.
- The Health Project. (n.d.). *Pacific Bell FitWorks*. Retrieved October 10, 2007, from http://healthproject.stanford.edu/koop/pacificbell/description.html
- Wellness Councils of America. (1995, May). Corporate leaders laud benefits of wellness.

 Worksite Wellness Works, 7 (2).

Woods C. B., Mutrie, N., & Scott, M. (2000). From inactivity to activity: A study of exercise behaviour change in 16–24 year olds. *Journal of Sports Sciences Abstracts*, 18, 61–62.

Appendix A Workplace Health Impacts

Organization and Number of Employees	Individual Employee Health Measures and Indicators	Aggregate Workplace Safety/Health Measures/Indicators	Measures/Indicators of Workplace Performance	Motivators/Support to Implement	Approaches/Strategies
Dofasco Inc. (7,300)	-Between 1993 and 1998, number of overweight employees declined by 5%; number of smokers declined by 5%	-Between 1991 and 2001, lost time injury rates fell by 66%; - between 1995 and 2001, WSIB premium rates fell by 63%	-External study concluded that H&S focus and team- based work organization contributed to an improvement in business metrics	-Changing workplace culture ("entitlement" culture changing to an "earnings" culture): linking employee success directly to company's success	Firm-owned fitness and recreation centre (featuring yoga and tai chi classes); programs for smoking cessation, weight loss, nutrition, exercise
American Express Canada (3,700)	-20% of employees participated in one or more fitness activities	-Employee satisfaction rates increased from 1998 to 2000, and stood well above industry and cross-company averages	-Company ranked as one of the 'Top 25 to work for' in Canada -Between 1998 and 2000, attrition rates fell from industry average (40%) to 23%	Employee focus groups	On-site fitness centre; programs for smoking cessation, weight loss, nutrition, exercise
Moose Jaw- Thunder Creek Health District (1,500)	-Participant surveys show 70% feel Wellness Program improved morale	-Sick days lower in 2001 than in 1997-1998 -Accident rates declined between 1997-98 and 2000-01	-Survey of patients rate overall satisfaction with services at 95%	-Health Canada's Health in the Workplace Survey: a needs assessment survey including questions on	Gym membership subsidy; programs for smoking cessation, weight loss, nutrition, exercise

				personal health, level of physical activity, stress, behaviour at risk, assistance at the workplace, and safety	
Seven Oaks General Hospital (1,365)	-Health Risk Appraisal (baseline measures) at start of program -records of employee participation in programs	-Between 1994 and 2002, WCB costs fell by over 50%;	-Plans to gather data on employee retention rates	Development of 'culture of respect'; emphasis on communications and improving employees' control over their work life	On-site fitness centre; programs for smoking cessation, weight loss, nutrition, exercise
Irving Paper Ltd. (375)	nts Illy moking	-Between 1995 and 2000, short-term disability costs fell by over 50%; total cumulative savings on short term disability costs were \$800,000WCB monthly costs fell by 60%	-Anecdotal reports of improved job satisfaction, morale, increased sense of control over work and working conditions; -Between 1992 and 2000, number of grievances fell from 50 per year to 11 per year; number of arbitrations fell from 3 per year to fewer than 1 per year	Employee Assistance program	Gym membership subsidy; programs for smoking cessation, weight loss, nutrition, exercise

QLT Inc. (300)	-About 50% of	-The number of	-Employee turnover	Proactive work-life	On-site gym and fitness
,		WCB claims is	rate is negligible	balance practices	centre, with personal
	р	minimal;	-Firm ranked in top	1	trainer; wide array of
	fitness facility	-No lost time injuries	50 Canadian		sports teams and
		in 2002	employers in		events; encouragement
			December 2001, and		to bike to work; healthy
			as 6th best BC		cafeteria choices
			employer in January		
			2002		
Vancouver	-200 employees	-Between 1998 and	-WCB claims costs	Employee support	On-site gym and steam
Shipyards	have used on-site	2001, 70% reduction	reduced from \$2.2	through education	room, with personal
(300)	gym and fitness	in WCB disability	million in 1998 to	and training from	trainer, physiotherapist,
	facility	claims	\$500,000 in 2001	allied health care	and rehabilitation
		-H&S audits show	-The firm's WCB	professionals	specialist; on-site
		increase in	rating assessment		kinesiologist advises on
		compliance scores	(used to determine		work layout
		from 56% to 72%	premiums) declined		
			by 60% between		
			1999 and 2001		
Vancouver	-50% of staff are	-75% of employees	-In 2000 IATA	Employee	Gym membership
International	registered in	in 2000, felt	survey, Vancouver	Assistance Program	subsidy and on-site
Airport	wellness	employer was doing	International Airport		fitness facility;
Authority (300)	programs	a 'very good job' on	Authority ranked as		programs for smoking
		H&S	best North American		cessation, weight loss,
		-Lost time accidents	airport for passenger		nutrition, exercise
		and days lost lower	satisfaction		
		than in early 1990s			
		-Hours lost through			
		disability reduced by			
		42% between 1999-			
		2001			

City of Regina	-30 employees	-Time lost through	-Program being	-Establishment of a	Gym membership
	per week in	WCB injuries fell	replicated in other	joint management-	subsidy and on-site
nent	blood pressure	from 597 days in	municipal	labour task force	fitness facility;
	clinics	1993 to 337 days in	departments	-The task force, in	programs for smoking
	-167 employees	2000, translating into		turn, was the main	cessation, weight loss,
	participated in	\$500,000 savings		impetus for the	nutrition, exercise
	baseline physical	-Sick days and injury		establishment and	Occupational Health
	assessment and	incidence generally		development of the	and Safety:
	follow-up, which	stable from 1992 to		Transfit Program	-Two-hour physical
	indicated little	2000		-Health, Safety, and	assessment and
	change in	-Anecdotal reports of		Organizational	individual counselling
	strength,	altered lifestyles		Division, a new	once every four years
	endurance,			division, was at	as a compulsory
	flexibility, etc.			forefront for	replacement for the
	-Close to full			promoting healthy	annual medial
	employee			workplace practices	examinations. In 2002,
	participation in				mandatory physical
	'Transfit Days'				assessments were
					amended to occur every
					second year instead of
					every 4 years, as
					initially piloted. The
					assessment included:
					-Medical and
					movement history
					questionnaire
					-Anthropometric and
					body composition
					analysis
					-Postural evaluation
					-Graded exercise stress

test	-Pulmonary lung	function screening	-Strength and muscular	endurance assessment	-Range of motion	assessment	-Guidelines for	behaviour change	**In the "off" years,	employees were given	6 programming options	to pick from,	coordinated and	facilitated by the Dr.	Paul Schwann Applied	Health & Research	Centre, University of	Regina. The options	were:	-One on one exercise	session at the Dr. Paul	Schwann Centre	-Comprehensive Health	& Fitness Assessment	and Consultation	-Wellness Checkpoint	and No Sweat	Assessment	-Lifestyle Counselling	Session

-Supervised
Conditioning
-Cardiac Kisk
Rehabilitation Program
 Voluntary Health
Practices:
-Passes and rebates to
recreation and sports
facilities
-Walking tread
machine and stationary
bike available to
employees in main
facility
-Transfit Centres:
Information kiosks
(posters, pamphlets,
and information on
upcoming special
events) located in the
garage where operators
work
-Transfit Days:
Designed to unveil the
Transfit kiosks and
promote good nutrition
-Wellness-Related
Events

Petro Canada	Information	-Between 1997 and	-Consistent reduction Lifestyle Seminars	Lifestyle Seminars	Gym membership
Burrard	unavailable	2001, no lost time	in unit costs over last	on variety of topics	subsidy and on-site
Products		due to injuries	6 years	including fitness,	fitness facility;
Terminal (120)			-Turnover rate almost	stress management,	programs for smoking
			lil	and smoking	cessation, weight loss,
			-Between 1993 and	cessation	nutrition, exercise
			1996, 6 grievances		
			filed; none since		
Rideau	Information	-Consistent decline in	-Low turnover; loses	Work-life balance	Gym membership
Construction	unavailable	WCB premium costs,	one employee per	initiatives	subsidy
Inc. (54)		1994-1999 (overall	year, on average		
		premium rate	-Ranked as the best		
		increase since)	company to work for		
			in Atlantic Canada in		
			2000 (and runner-up		
	;		in 2001)		
Pazmac	-70% of staff	-Average of only 0.1	-Turnover rate almost	Design of entire	On-site fitness centre
Enterprises	participate	sick leave days per	nil (only 3 employees	facility stressed	(containing a gym,
Ltd. (30)	weekly with	employee per year	have left voluntarily	employee wellbeing	swimming pool, and
	personal trainers;	-WCB assessment	in the last 5 years)		personal trainers)
	-Anecdotal	rate reduced from			
	reports of better	2.83% in 1996 to			
	health	2.60% in 2001			

Note. From "Twelve Case Studies on Innovative Workplace Health Initiatives: Summary of Key Conclsions", by Canadian Labour and Business Centre, 2002, p. 20.

Appendix B Sample Physical Activity Program Manual for Employers

Physical Activity in the Workplace

Implementing a physical activity program in the workplace has many benefits, including benefits to the individual, co-workers and your organization. Providing these programs will not solve all health issues but they have been shown to improve employee relations, improve health and wellness, reduce absenteeism and retain employees.

This manual provides you with a step-by-step guide toward implementing a successful comprehensive workplace health promotion program within your workplace. Also provided is a sample healthy workplace topic (i.e. physical activity), which you can use as a template during the process for implementing your own tailored program to meet the specific needs of your employees and the company they work for.

If you would like more information about Physical Activity in the Workplace, please contact:

Thunder Bay District Health Unit 999 Balmoral Street Thunder Bay, ON P7B 6E7 Phone: (807) 625-5900

Phone: (807) 625-5900 Toll-Free: (888) 294-6630

Table of Contents

Healthy Workplaces	31
Comprehensive Workplace Health Promotion (CWHP)	32
Elements of CWHP	33
Physical Environment	34
Personal Health Practices	34
Supportive Environment	35
Implementing CWHP In the Workplace	37
Step 1: Obtain Organizational Commitment	37
Management/Business Owners	37
Unions/Employee Associations	38
Employees	38
Other Key Stakeholders	38
Tips For Obtaining Organizational Commitment	38
Step 2: Form a Committee	39
Purpose	39
Membership	39
Meetings	40
Responsibilities of the Chairperson	40
Step 3: Identify Employee Interests and Needs	40
Hard-to-Reach Employees	41
Workforce Overview	41
Existing Strengths and Challenges	42
Assessment Methods	43
Tips for Identifying Employee Interests and Needs	43
Step 4: Develop an Action Plan	44
Tips for Developing an Action Plan	45
Step 5: Implement the Action Plan	45
Tips for Implementing the Action Plan	46
Step 6: Review Your Progress	46
What Has Been Done	46
What Was The Impact of the Activities/Changes?	47
Tips for Reviewing Your Progress	47
Role of Public Health	47
References	49
Appendix A - Sample Healthy Workplace Topic - Physical Activity	52
Appendix B - Guidelines for Creating a Policy	55
Appendix C - On-Line Resources	59
Appendix D – Assessment Methods	60

Healthy Workplaces

A variety of research has been conducted over the last number of years that supports the notion that the workplace environment has a substantial effect on the health of employees. It is now evident that how healthy a person feels directly affects their job satisfaction and their productivity. Healthy workplaces benefit organizations and individuals alike and result in:

- Improved productivity
- Decreased absenteeism
- Fewer accidents; reduced Workplace Safety Insurance Board (WSIB) claims
- Reduced health benefit costs
- Improved retention and recruitment
- Improved health and wellness
- Better employee relations
- Improved morale; higher levels of employee engagement
- Improved corporate culture and image; increased image as 'employer of choice'
- Strengthened human capital management approaches
- Contribution to attainment of social goals of triple bottom-line reporting systems (Craig, Beaulieu & Cameron, 1994; Bachmann, 2002)

Comprehensive Workplace Health Promotion (CWHP)

- A systematic design of programs that enhance organizational and employee health
- The creation of a healthy culture which values and meets individual and organizational needs
- A philosophy and practice of health promotion that is intended to be incorporated
 into the organization's strategic business plan (it belongs in the plan because what
 is good for employee health is also good for organizational productivity,
 efficiency and competitiveness)
- A method to help individuals move toward a state of optimal health (emotional, physical, social, spiritual and intellectual health)
- The use of various initiatives to increase employee awareness of health issues and outcomes and create supportive environments in which positive change can occur (Shain & Suurvali, 2001; Baker, Coleman & Sormin, 2002; Bachmann, 2002)

Elements of Workplace Health

The National Quality Institute, (1998) has identified three elements, which impact workplace health:

- Physical environment
- Personal health practices
- Supportive environment.

QuickTime™ and a TIFF (LZW) decompressor are needed to see this picture.

(National Quality Institute, 2004)

Physical Environment

A healthy physical environment is one in which employee health and safety is ensured, by following current health and safety legislation and directives. In promoting a healthy physical environment one should consider quality and sustainability. Some areas an organization may address are (Oldenburg, Sallis, Harris & Owen, 2002):

- General workplace conditions and facilities (cleanliness and safety)
- Potential for violence in the workplace and strategies to deal with such risks
- Employees' understanding of emergency systems in the workplace
- Accommodation of employees who have health-related restrictions and/or disabilities
- Ergonomics and issues related to occupational hygiene (i.e., lighting, noise, ventilation, etc.)
- External pollution and methods of dealing effectively with hazardous substances
- Effective workplace safety committees
- Health and safety training

Personal Health Practices

This element considers how the work environment enables and supports healthy lifestyles, behaviours and coping skills for dealing with life in healthy ways (Pelletier, 1993; Sorensen, Hsieh, Hunt, Morris, Harris & Fitzgerald, 1992). In promoting healthy practices among employees, some areas, which may be addressed, are:

- Tobacco use
- Nutrition
- Alcohol and other drug use

- Sexual practices
- Physical activity
- Immunization
- Infection control

Supportive Environment

This element examines organizational culture. Culture is created, reinforced, and sustained by patterns of human relationship and communication that have a significant positive or negative influence on mental, emotional, physical, and spiritual health. When underlying organizational culture is ignored, workplace health programs are more likely to fail (Allen & Leutzinger, 1999).

A healthy supportive environment ensures that employees are treated with respect and fairness. It provides employees with a sense of belonging, purpose and mission, and control over their work. Employees have freedom of expression, and protection from harassment and discrimination. Trust is a precondition for productive and equitable employment relations. It is based on the expectation that both parties will act fairly and fulfill their terms of an arrangement. Trust is about interdependence and reciprocity; for employees, trust develops from the perception that management is concerned about their well-being, is competent to handle organizational change, and is open and honest about change (Lowe, 2004). Initiatives that can help create a healthy supportive environment include:

- Sensible pace and schedule for production/service delivery
- Accessible job training and education opportunities
- Assessment of organizational stress and systematic approaches to

reducing/eliminating stress

- Supportive policies and practices that respect the need for employees to balance home and work responsibilities (e.g., flexible hours, job sharing, support for child care)
- Fatigue management program, especially for shift workers
- Opportunity for employee input regarding achievement of organizational goals
- Opportunity for employee participation in overall control of their jobs
- Practice of open communication, ongoing feedback, active listening, information sharing
- Education regarding the role of workplace culture in one's health and well-being
- Employee involvement in identifying current culture and possible positive changes
- Assessment of performance based on work contribution
- Encouragement, support, and reward for creativity, innovation, and informed risk-taking

(National Quality Institute [NQI], 1998; Human Resources & Skills Development Canada [HRSDC], 2004)

Implementing Comprehensive Workplace Health Promotion (CWHP)

The following information has been adapted with permission from Health Canada's Workplace Health System (2004), and the Brant County Health Unit's Wellness Works Guide (2001).

Step 1: Obtain Organizational Commitment

To build a healthier workplace, everyone needs to be working towards a common goal. Support for and active involvement in the workplace health program needs to exist at all levels.

Management/Business Owners

Senior management plays a critical role in creating a healthy work environment (Bachmann, 2002). Management commitment and involvement demonstrates seriousness about health. The perception that senior management, supervisors, and coworkers have positive attitudes toward health has been associated with improved employee health (Thesenvitz, 2003).

Managers can:

- Be involved and enthusiastic
- Respond to employee-identified concerns
- Ensure a comprehensive approach to workplace health
- Provide appropriate resources:
 - Time within the workday for staff to plan and implement activities 0
 - People to build the healthy workplace program
 - Money and materials 0
- Follow up on progress, expect results, and reward appropriately

Unions/Employee Associations

Success is more likely if unions support the concept of wellness and recognize the benefits of a wellness program for members, and employee groups are active partners from the start.

Employees

Grass roots involvement and participation from the start is critical to the programs' success.

Other Key Stakeholders

Others who can participate in the process of improving workplace health are:

- Staff from occupational health
- Health and safety representatives
- Human resource personnel
- Benefits and/or training and development departments
- Company suppliers
- Customers
- Family members of employees

Tips for Obtaining Organizational Commitment

- Meet with key individuals and decision-makers to gain support and commitment
- Present to management, unions, etc, the importance of healthy workplace program.
- Create a business plan/proposal to promote the allocation of resources to workplace health
- Create a letter of understanding for all involved parties to sign, which would:
- Outline the degree of commitment of each party involved

- Identify each person's role and responsibility
- Establish a timeline for implementation
- Express a willingness to respond to employee-identified needs, as appropriate
- Express a willingness to provide necessary resources (i.e., financial commitment/budget)

Step 2: Form a Committee

The workplace health committee drives workplace health initiatives, and should be put together carefully. A new committee can be formed, or an appropriate existing committee can do the work. The chairperson should be a committed individual, who can ensure all members work well together.

Purpose

- Provide leadership and direction for promoting health in the workplace
- Promote and maintain communication between employees and management
- Recruit staff volunteers and build support for healthy workplace initiatives
- Identify needs and concerns
- Oversee the planning, implementation and evaluation of the healthy workplace program

Membership

- Ensure broad representation to reflect the organizational composition and to promote employee acceptance; management, employee representatives and union/employee association representatives should be included
- Make participation voluntary
- Include 5-10 committed, enthusiastic individuals (other interested persons can form

task groups/sub-committees; distributing work and periodically rotating members maintains energy)

Meetings

- Committees usually meet more often during initial stages of a healthy workplace program
- A minimum number of meetings should be planned for the year, with clear objectives
- An agenda should be circulated prior to meetings, and meeting minutes should be taken and circulated to committee members and management promptly

Responsibilities of the Chairperson

- Drafts agenda for meetings & ensures minutes are recorded and distributed
- Ensures everyone has an opportunity to speak and be heard at meetings
- Ensures the committee creates & adheres to its 'Terms of Reference'
- Assists individual committee members to identify and work towards a common goal
- Resolves conflict and misunderstandings that pertain to the workplace health program
- Determines distribution of information to employees, management and committee members

Step 3: Identify Employee Interests & Needs

Understanding employee needs, concerns and preferences promotes participation and commitment, and ensures the program reflects what employees consider important.

Hard-to-Reach Employees

To ensure inclusive assessment, special attention needs to be given to employees that may be difficult to reach due to literacy challenges, ethnic groups, off-site and seasonal workers, and socially or culturally isolated workers. Identifying and addressing employees' health needs helps achieve better overall individual and organizational health. Confidential, non-threatening methods of data collection are best: personal interviews conducted by external people, computer assisted questionnaires, or telephone interviews (Health Canada, 2002).

Workforce Overview

Some organizations conduct a workforce overview. This information, assessed over the long term, helps track and evaluate the progress of the workplace health program. It provides, however, only an estimate of program success.

The following data may be gathered:

- Organizational demographics
- Type of business/work
- Demographics (gender, age, education, ethnicity, years of service, language, etc.)
- Job classification types (full-time/part-time)
- Work scheduling, shifts, hours worked and peak season(s)
- Absenteeism rates
- Workplace Safety and Insurance Board statistics
- Benefit costs
- Prescription drug claims
- Short and long-term disability statistics; disability leave/sick days

- Staff turnover
- Grievances
- Company surveys (e.g., employee satisfaction, quality of work-life balance)
- Organizational data from a parent/sister company
- Insurance health benefit information (compared to other organizations)
- Statistics Canada data
- Conference Board of Canada reports and research studies
- Public Health Department reports (e.g., Community Health Status Report)

Existing Strengths and Challenges

Understanding existing resources or strengths within an organization prevents duplication and provides a valuable starting point for the development of new programs. Strengths may include:

- Wellness-based events and groups (e.g., health fair, staff BBQ, social club, baseball team)
- Group benefits/drug coverage (e.g., Employee Assistance Program, massage therapy)
- On-site facilities (e.g., health centre, fitness centre, gym, cafeteria, gardens/green space)
- Policies (e.g., smoking, harassment, flex-time, alcohol/drug, family days)
- Corporate culture (e.g., communication, employee and management feedback evaluations)
- Employee culture (e.g., staff morale and satisfaction, employee relationships)
- Professional development opportunities

 Other cost containment initiatives (e.g., absentee & disability management programs)

Each workplace has unique challenges and possible roadblocks that can interfere with workplace health program initiatives. These challenges come from all organizational levels and may include:

- Unhealthy employee culture/corporate culture
- Unhealthy relationship between management and employees
- Lack of employee acceptance
- Insufficient funds for the program
- Conflicting employee work schedules; lack of workday flexibility
- Poor organizational communication
- Lack of employee involvement in decision-making

Assessment Methods

A variety of methods can be used to collect information from employees, each with its advantages and disadvantages. These methods can be used alone or in combination (see Appendix C).

Tips for Identifying Employee Interests and Needs

- Select the method(s) of assessment that best suit the organization's needs/resources
- Develop a marketing plan for the promotion, distribution and collection of the assessment tool
- Remember that the greater the participation, the more accurate and complete the
 results. A survey response rate should be 50% or higher; if it is less than 50%,
 other forms of information collection can be used to verify survey results and fill

in gaps

- Attach a signed letter to the assessment tool, describing workplace health, reasons for doing an assessment, existing stakeholder support, and communication plans
- Consider confidentiality or anonymity needs when collecting information as employees may provide more honest answers if confidentiality is guaranteed
- Tap into already existing data that may provide helpful information
- Complete an assessment every few years, to compare results and identify new/prevailing issues

Step 4: Develop an Action Plan

An action plan charts the direction for the future of the workplace health program.

- Determine key findings
- Review the information collected (employee group feedback sessions can ensure accuracy)
- Identify common themes or findings
- Prioritize findings to establish program direction
- Develop realistic goals, objectives, and activities
- Consider previously identified organizational strengths and challenges, and their impact
- Address concerns related to the three elements of workplace health: personal health
 practices, the physical environment, and the supportive environment
- Ensure the needs of all employees are addressed, regardless of current level of health, literacy level, cultural group, social and skill background
- Make program recommendations, including the following information:

- O What you want to achieve (goals)
- Who the activity is for (target audience)
- What specific strategies/activities will allow you to accomplish your goals

Tips for Developing an Action Plan

- Create a balance between what employees want and what the employer can do
- Keep the plan confidential until approved by the committee and other key stakeholders
- Share the approved plan with all employees, to promote credibility & employee acceptance
- Keep the plan short and easy to read
- Review and update the plan regularly
- Be sensitive to age, body limitations and cultural differences

Step 5: Implement the Action Plan

Once the general recommendations have been identified, the details can be established. For each recommendation that will be implemented, the following information should be determined:

- What resources are needed for the activity (internal/external; time, people, money)
- When the activity will be implemented (remember that both short-term (6-12 months) and long-term (1-3 years) objectives need to be included)
- Who will take responsibility for pushing the initiative forward
- What the expected result of the activity is
- How the activity will be monitored and evaluated

Tips for Implementing the Action Plan

- Make the participation voluntary
- Market continually, in a variety of ways
- Make participation flexible (i.e., fitness club membership vs. on-site fitness classes)
- Provide incentives for participating (these can increase participation rates as much as 35%)
- Make sure there is a balance between educational and 'fun' programs
- Ensure activities are customized to fit the workplace
- Ensure results are SMART Specific, Measurable, Achievable, Realistic, Time
 limited

Step 6: Review Your Progress

Reflect on what has been accomplished, on an ongoing basis through every stage of the wellness program. The evaluation does not have to be an overwhelming task. Find out the following:

- What are the ongoing wellness needs within the organization?
- Are initiatives meeting the identified objectives?
- What is working, and what is not working?
- What improvements need to be made?
- Have employee needs changed?

What Has Been Done?

There are a number of ways to evaluate what has been done. Some examples include:

• Pre-testing of program materials

- Attendance lists/number of participants
- Participant and/or instructor evaluation forms
- Employee questionnaires and surveys

What Was The Impact of the Activities/Changes?

There are a number of ways to evaluate impact. Some examples include:

- Surveys (e.g., before and after, group feedback)
- Individual or group interviews
- Evaluation forms assessing knowledge, attitude and behaviour changes
- Environmental audits of healthy workplace policies and programs
- Collection and analysis of changes in statistics (e.g., Employee Assistance Program usage data, Workers Safety Insurance Board claims, etc.)

Tips for Reviewing Your Progress

- Determine if goals have been met
- Get ongoing feedback from employees, including suggestions for improvement
- Adjust the plan according to feedback received
- Keep stakeholders updated on progress made

Role of Public Health

Local public health units in Ontario have a specific mandate to support organizations in the promotion of health. They can provide the following:

- Assistance with the development of a specific business case for your organization
- Support for the development of a workplace health promotion employee/management team
- Assistance with employee needs assessment

- Help to navigate through and link with community/health services and existing resources
- Provision of healthy lifestyle programs

(The Health Communication Unit [THCU], 2004)

References

- Allen, J. & Leutzinger, J. (1999). The Role of Culture Change in Health Promotion. The Art of Health Promotion. 3 (1), 1-12.
- Bachmann, K. (2002). Health Promotion Programs at Work: A Frivolous Cost or a Sound Investment? Ottawa, ON: Conference Board of Canada.
- Baker, J., Coleman, B.L. & Sormin, S.M. (2002). Workplace Health Promotion:

 Assessing Employee's Health Related Needs. St. Thomas, ON: Elgin-St. Thomas

 Health Unit.
- Brant County Health Unit. (2001). Wellness Works: A Guide for Building a Healthy Workplace. Brantford, ON: Brant County Health Unit.
- Craig, C.L., Beaulieu, A., & Cameron, C. (1994). Health Promotion at Work: Results of the 1992 National Workplace Survey. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.
- Gibson, J. (May 1998). Loyal Customers, Enthusiastic Employees and Corporate

 Performance: Understanding the Linkages. Conference Board Document, The

 Conference Board of Canada. Abstract retrieved October 23, 2007, from

 http://www.hrsdc.gc.ca
- Health Canada (2004). Workplace Health System Corporate Health Model. Retrieved October 2, 2007 from http://www.hc-sc.gc.ca
- Health Canada, Health Promotion and Programs Branch. (1999). HealthWorks: A "how-to" for health and business success. Ottawa, ON: Health Canada.
- Health Canada, Health Promotion and Programs Branch. (2002). Workplace Health:

 Discovering the Needs." Retrieved October 11, 2007 from http://www.hc-sc.gc.ca

- Human Resources and Skills Development Canada (2004). Moving Beyond Policies and Programs to Bring about Culture Change. Retrieved October 4, 2007 from http://www.hrsdc.gc.ca
- Lowe, G. (June 2004). Cultural foundations of a healthy workplace. In Concurrent session B, Comprehensive Workplace Health Promotion Conference: Supporting Local Efforts in Ontario at BMO Institute for Learning, Toronto, ON.
- MacBride-King, J. (June 1999). Work-Life Balance No. 2: Managers, Employee

 Satisfaction and Work-Life Balance. Conference Board Document, The

 Conference Board of Canada. Abstract retrieved October 23, 2007, from

 http://www.hrsdc.gc.ca
- National Quality Institute [NQI]. (1998). Canadian Healthy Workplace Criteria. Toronto, ON: National Quality Institute and Health Canada.
- National Quality Institute [NQI]. (2003). Dollars. People. Data. Beating the competition.

 Retrieved October 2, 2007 from http://www.nqi.ca
- National Quality Institute [NQI]. (2004). NQI healthy workplace for small organizations:

 10-point healthy workplace criteria and self-evaluation tool. Toronto, ON: National Quality Institute.
- Oldenburg, B., Sallis, J. F., Harris, D., & Owen, N. (2002). Checklist of health promotion environments at worksites (CHEW): development and measurement characteristics.

 American Journal of Health Promotion, 16, (5), 288-299.

- Pelletier, K. A. (1993). A review analysis of the health and cost effective outcomes studies of comprehensive health promotion and disease prevention programs at the worksite: 1991-1993 update. *American Journal of Health Promotion*, 5(108), 50-62.
- Shain, M., & Suurvali, H. (2001). Investing in Comprehensive Workplace Health Promotion: Toronto, ON: Centre for Addiction and Mental Health.
- Sorensen, G., Hsieh, J., Hunt, M. K., Morris, D. H., Harris, D. R., & Fitzgerald, G. (1992). Employee advisory boards as a vehicle for organizing worksite health promotion programs. *American Journal of Health Promotion*, 6, (6), 443-450.
- The Health Communication Unit (2004). Workplace Health Promotion Project. Retrieved October 2, 2007 from http://www.thcu.ca/workplace/workplace.html
- Thesenvitz, J. (2003). Conditions for Successful Workplace Health Promotion

 Initiatives: Supporting Comprehensive Workplace Health Promotion in Ontario

 Project. Toronto: The Health Communication Unit, Centre for Health Promotion,

 University of Toronto.
- York Region Health Services, Public Health Branch. (2001). Healthy Policy = Healthy
 Profits...A guide to implementing wellness policies in your workplace. Richmond
 Hill, ON: York Region Health Services, Public Health Branch.

Appendix A Sample Healthy Workplace Topic - Physical Activity

Physical Activity

Helping employees get active improves health and the bottom line. Physical activity contributes to better overall health and self-esteem, improved fitness, increased relaxation and reduced stress. Recent data on physical activity tells us that two-thirds of Canadians are not active enough to attain optimal health benefits (Canadian Fitness and Lifestyle Research Institute, 1998). Workplaces that invest in active living activities can see results such as reduced absenteeism and stress-related illness, and improved employee job satisfaction (Health Canada, 2001).

Return on Investment - Evidence in Canada

- Canada Life in Toronto showed a return on investment of \$3.40 for each corporate dollar invested on reduced turn over, productivity gains & decreased medical claims.
- Municipal employees in Toronto missed 3.35 fewer days in the first six months of their "Metro Fit" fitness programs than employees not enrolled in the program.
- The Canadian Life Assurance Company found that the turnover rate for fitness program participants was 32.4% lower than the average over a seven-year period.
- Dr. Roy Shephard found corporate wellness programs returned a cumulative economic benefit of \$500 - \$700 per employee per year.

Education and Skill Building

- Invite fitness professionals to demonstrate various activities employees can explore further
- Provide "fit tip" ideas via bulletin boards, newsletters, or email messages

• Offer on-site classes/programs of interest to employees

Environmental Support

- Introduce hourly 5-minute stretch breaks for both office and factory workers
- Organize sports leagues & tournaments
- Invest in showers/change rooms to promote walking/cycling to work, and lunchtime exercise
- Plan social events that have a physical activity component and include family members
- Make local walking and cycling trail maps available
- Provide facilities & equipment for employee's to engage in physical activity
 (consider the feasibility of contracting services to be brought into your workplace, including liability costs)

(York Region Health Services, 2001)

Policy Considerations

- Consider cost sharing or reimbursement of fitness club membership fees
- Offer flexible work hours to enable employees to take advantage of exercise opportunities
- Investigate ways to include employee's family members, as added incentive
- Ensure activities are accessible to all employees on all shifts

References

Canadian Fitness and Lifestyle Research Institute. (1998). Lifestyle Tips: Being Active Saves Heart Disease Costs. Retrieved October 10, 2007, from http://www.hc-sc.gc.ca/hppb/fitness/work/case-template-e.html

City of Ottawa Workplace Health Program (2002). Policy: The Key to a Healthy

Workplace - A guide to making your organization healthier. Ottawa, ON: Region

Health Canada. (2001). The Business Case for Active Living at Work. Retrieved October 10, 2007, from http://www.cflri.ca/cfl ri/tips/index.html

Resources

Active Living at Work www.activelivingatwork.com

Active Ontario www.active2010.ca

Active Transportation – Public Health Agency of Canada http://www.phac-aspc.gc.ca/pau-uap/fitness/active trans.htm

Active Transportation – Lifestyle Information Network http://lin.ca/active-transportation

of Ottawa-Carleton Health Department.

National Recreation Database - Lifestyle Information Network http://lin.ca/recreation-database

Canada's Physical Activity Guides www.paguide.com

Canadian Council for Health and Active Living at Work www.cchalw-ccsvat.ca

Stairway to Health www.healthcanada.ca/stairwaytohealth

Public Health Agency of Canada http://www.phac-aspc.gc.ca/chn-rcs/wh-smt-eng.php?rd=work_travail_eng

Appendix B Guidelines for Creating a Policy

The City of Ottawa Workplace Health Program (2002) identifies five phases of development:

Phase1: Identify the issue(s) and need for a policy

- Identify concerns, attitudes and preferences through surveys, focus groups, etc.
 Consider collecting &/or reviewing data from health screenings, lifestyle surveys, absenteeism rates, worker compensation claims, drug costs, etc.
- Review related policies from similar organizations; network with those experiencing success
- If related policies &/or programs exist, review participation and available feedback;
 consider how they can be better supported, expanded or improved
- Collect information to show the potential benefits of addressing the problem through policy
- Link the policy to the organization's core business and mission
- Prepare a cost analysis
- Build in evaluation of the policy throughout its development, implementation & monitoring

Phase 2: Gather support from all employees

- Meet formally or informally with all levels of staff
- Gather staff from all levels to develop the policy (use existing groups if possible)
- Seek and consider opinions on how the policy will work within your unique workplace
- Raise awareness and interest of employees/management through special activities

Employ principles of change management - communicate directly and honestly,
 encourage participation and ownership of the process, seek out and incorporate
 feedback

Phase 3: Draft the policy

- Include within the policy the following:
- Rationale for the policy
- Simple policy statement
- Objectives & scope of the policy
- Parts and guidelines of the policy
- Implementation stages of the policy with a timetable
- Criteria for evaluating effectiveness of the policy
- Implications of the policy (i.e., financial, staffing, productivity, morale)
- Person(s) responsible for implementation and ongoing management of the policy
- Consider different types of policies & options (i.e., phasing in may enhance compliance)
- Consider piloting a policy with an evaluation
- Ensure the policy is consistent with other workplace policies & practices
- Keep employee language/literacy levels in mind when writing and communicating the policy
- Communicate the plans and progress to all employees on a regular basis
- Seek feedback on the draft policy from all levels within the workplace
- Have the president, owner, or the highest manager endorse the finalized policy in writing

Phase 4: Implement the policy

Pre-implementation

- Send a copy of the policy with a personal letter, including the name of a contact
 person, to everyone at least 4-6 weeks in advance of the implementation date;
 review policy verbally with employees for whom language or literacy may be a
 concern
- Present the finalized policy, outline expected benefits, and respond to questions and concerns; emphasize employer's and employee's joint responsibility in policy implementation
- Gather employee suggestions for implementation
- Identify helpful resources (i.e., EAP, sport facilities, community resources, written resources)
- Consider using incentives
- Examine the need for promotional aids (e.g., signs, posters), and consider a kick-off
 event

Implementation

- Post the policy; include it in employee handbooks, policies & procedures manual,
 etc.
- Discuss the policy during employee orientation
- Support managers/supervisors in the change process
- Reinforce the policy with strategies that promote education and raise awareness,
 provide opportunities for skill building, and create a supportive work environment

• Enforce polices in a fair and consistent manner; ensure the policy pertains to all employees

Phase 5: Monitor the policy

- Assign one respected person to oversee implementation and to receive complaints
- Monitor participation/compliance levels; troubleshoot potential problems or areas of concern
- Provide additional information sessions or ongoing employee education program as needed
- Evaluate progress relative to stated objectives and evaluation plan; modify policy as needed

Note. From "Policy: The Key to a Healthy Workplace-A Guide to Making Your Organization Healthier," by the City of Ottawa Workplace Health Program, 2002, Ottawa, ON: City of Ottawa. Reprinted with permission of the author.

Appendix C Online Resources

Alberta Centre for Healthy Living – Physical Activity at Work http://www.centre4activeliving.ca/workplace/en/index.html

Canadian Centre for Occupational Health and Safety – Bringing Health to Work http://www.ccohs.ca/healthyworkplaces/

Healthy Workplace Week http://www.healthyworkplaceweek.ca/index.php

National Quality Institute www.nqi.ca

Natural Health Care — Workplace Wellness http://naturalhealthcare.ca/workplace_wellness_programs.phtml

Physical Activity Resource Centre http://www.ophea.net/Ophea/PARC/index.cfm

Public Health Agency of Canada – Stairway to Health http://www.phac-aspc.gc.ca/sth-evs/english/index.htm

Public Health Agency of Canada – Active Living at Work http://www.phac-aspc.gc.ca/pau-uap/fitness/work/index.html

The Canadian Council for Health and Active Living at Work http://www.cchalw-ccsvat.ca/english/

The Health Communication Unit – Workplace Health Promotion Project http://www.thcu.ca/Workplace/Workplace.html

Workplace Health Strategies Bureau of Health Canada http://www.hc-sc.gc.ca/ewh-semt/occup-travail/work-travail/wh-mat-strategies e.html

Appendix D Assessment Methods

Format	Advantages	Challenges
One-on-one/group	Obtains in-depth	Not representative of all
discussions: informal	information & clarifies	employees; can't ensure
meetings to discuss	employee questions	confidentiality if group
concerns & share ideas	emproyee questions	format
	Promotes employee "buy-	Can be time-consuming
	in" & creates enthusiasm	3
	for program	
	Gauges employee response	Could receive misleading results
Suggestion box (could be	Easy to administer; not	Needs to be promoted
electronic)	time-consuming	before & during time it is set up
	Suggestions can be	All suggestions need to be
	anonymous	acknowledged and
		considered seriously &
		confidentially; not
		representative of all
		employees
	Easy to complete	Needs to be attractive,
	Lusy to complete	accessible & visible
Employee health &/or	Reaches a large number of	Time-consuming; could be
interest survey:	employees	costly to implement &
questionnaire to collect		tabulate survey
information related to		
employee health & safety	Provides lots of information	Requires time & effort to
issues		set up & implement survey,
		and tabulate & evaluate
		information
	Promotes confidentiality &	Does not always gather a
	employee comfort in	good mix of different
	disclosing concerns	employee groups
	Information can be used to	May be difficult to ensure
	evaluate workplace health	adequate number of surveys
	program	returned
	Can also be used to recruit	Needs to be well promoted
	1 Carr and of about to recruit	1 2 . Codo to oo ou promotod

	interested employees & promote employee "buy-in"	
Employee meetings: formal meetings with larger groups of employees to receive feedback	Has the potential to reach a large number of employees	Need to ensure good mix of all the different groups in the workplace
	Can obtain in-depth information & clarify employee responses re: vision of healthy workplace, areas needing improvement, suggested activities	Employees may not be willing to discuss certain health, personal &/or family issues
	Promotes employee buy-in	Requires time & effort to set up & implement meetings, and analyze the information collected

Note. Adapted from Health Canada, 1999 & Brant County Health Unit, 2001