



Effective Public Health Practice Project Summary Statement

July 2005

This is a summary statement written to condense the work of the authors of a systematic review. The reference for the full review is below. The intent of this summary is to provide an overview of the findings and implications of the full review. For more information on individual studies included in the review, please see the review itself.

Reference for Review in APA: Proper, K.I., Staal, B.J., Hildebrandt, V.H., van der Beek, A.J. and van Mechelen, W. (2002). **Effectiveness of physical activity programs at worksites with respect to work-related outcomes.** *Scandinavian Journal of Work, Environment Health*, 28, (2) 75-84.

Issue: Incorporating physical activity into daily life is a key determinant of health and well being. In Canada, according to the Canadian Community Health Survey, 2000/2001, 49.1% of Canadian adults were not active enough in their leisure time to attain optimal health benefits (Statistics Canada, 2002). It is noted that one of the most popular barriers to participating in regular physical activity is time (Health Canada, active living at work, 2002). By creating physical activity programs at worksites, time is no longer a barrier to an active lifestyle. Such programs are now available to employees in a range of settings.

Review Content Summary: A systematic review was conducted to assess the effectiveness of physical activity programs at worksites on work-related outcomes. The outcomes of interest included absenteeism, job satisfaction, job stress, productivity, and employee turnover.

Comments on this review's methodology: Four randomized controlled trials (RCTs) and four nonrandomized, controlled trials (NCTs) met the criteria for this study. Methodological quality was scored according to nine criteria (i.e. randomization procedure, similarity of study groups at baseline, eligibility criteria, drop-out rate, blinding of outcome assessor, compliance, intention-to-treat analysis, timing of outcome assessments, follow-up measurement). Studies were considered high quality when 50% of the quality criteria were assessed positively. Two reviewers independently evaluated the studies. Two RCTs and one NCTs were judged to be of "high quality". For RCTs, most of the shortcomings were due to unclear descriptions of the randomization procedure and the inclusion criteria. For NCTs, a lack of a sufficient description of the inclusion criteria, dropouts, or the level of compliance with the intervention were common shortcomings. Only one 'high quality' study, a NCT, had included an intention-to-treat analysis.

To assess the effectiveness of the interventions, evidence was rated on 5-point scale as 'strong', 'moderate', 'limited', 'inconclusive' or providing 'no evidence'. The study period of the four RCTs varied from 6 to 12 months, while that of the NCTs lasted from 8 weeks to 1 year. For study population, both blue- and white-collar workers were investigated in the studies.

City of Hamilton
Public Health Services

Kingston, Frontenac and Lennox
& Addington Public Health

Middlesex-London Health Unit

Sudbury District Health Unit

Ottawa People Services

Public Health Branch
Ministry of Health and Long-Term Care

Evidence points ARE weighted or ranked according to strength

What's the evidence?	Implications for practice and policy:
<ul style="list-style-type: none"> > There is limited evidence for the effectiveness of physical activity programs at worksites with respect to absenteeism from work. > Several studies evaluated the effectiveness of physical activity programs versus absenteeism from work. Results were mixed, but one 'high quality' RCTs found a significant positive effect of the program on absenteeism from work among white-collar workers. 	<ul style="list-style-type: none"> > Physical activity programs at worksites may reduce absenteeism from work. White-collar workers, performing hardly any physical activities during work, show greater benefits than blue-collar worker do.
<ul style="list-style-type: none"> > There is inconclusive evidence for effectiveness regarding job satisfaction, job stress, and employee turnover. > There is no evidence for effectiveness in respect to productivity. 	<ul style="list-style-type: none"> > The authors suggest that the inconsistency of finding is largely due to variations in definition and the assessment of the outcomes or to the compliance with the program. Future studies should give attention to define outcome measures and the description of the participation rate.
<ul style="list-style-type: none"> > Some studies reported that interventions were effective for some subgroups, but not others (e.g. effective for white-collar workers, but not for blue-collar workers) 	<ul style="list-style-type: none"> > Quantitatively and qualitatively investigate the reasons for the differences in outcomes for some subgroups.
<ul style="list-style-type: none"> > The majority of studies evaluating the effectiveness of physical activity program have methodological flaws. 	<ul style="list-style-type: none"> > Research into the area should include high quality RCTs. As well, successful intervention studies should have sufficient power to detect any between group differences. Future RCTs should pay special attention to the description of randomization, inclusion criteria, compliance, and analyses according to intention to treat.
<p>General Implications:</p> <ul style="list-style-type: none"> > The research evidence suggests that physical activity programs at worksites may have a positive effect in reducing absenteeism from work in white-collar workers. 	

Cost Benefit or Cost-Effectiveness Information: Not included in review.

References Used to Outline Issue:

Health Canada, Active Living at work.

<http://www.phac-aspc.gc.ca/pau-uap/fitness/work/index.html>

Statistics Canada, the Canadian Community Health Survey: A First Look. The Daily, May 8, 2002.

<http://www.statcan.ca/Daily/English/020508/d020508a.htm>

Summary Statement Author: Lili Liu, B.Sc.Phm., MSc, Research Analyst, Effective Public Health Practice Project, Public Health and Community Services, City of Hamilton, Hamilton, Ontario.

Contact Information for the Effective Public Health Practice Project (EPHPP):

Public Health Services
Effective Public Health Practice Project
2 King Street West, 3rd Floor
Dundas, Ontario L9H 6Z1

Phone: 905-546-2424, Ext. 1578
Fax: 905-628-6465
Email: ephpp@hamilton.ca
Website: <http://www.hamilton.ca/ephpp>



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