

# The Research File

Summary from the Canadian Fitness and Lifestyle Research Institute and ParticipACTION

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## Workplace Physical Activity

In the past, many occupations demanded high levels of physical activity; however, advances in manufacturing processes, robotics, heavy equipment and technology have reduced the physical work required of a modern workforce. The workplace offers an effective venue for the delivery of physical activity promotion to the majority of the adult population, but few workplaces provide such opportunities. Dugdill and colleagues recently reviewed existing literature to identify which types of workplace physical activity interventions were effective in changing physical activity behaviour for different workplace sectors and types of workplace, and which aspects of intervention design and delivery contributed to effectiveness. Finally, they examined contributory motivators, barriers and facilitators.

### *Interventions differ in effectiveness*

The authors concluded that among the populations studied the following

workplace interventions have shown promise in increasing physical activity:

- Pedometer programs when paired with facilitated goal setting, diaries and self-monitoring, and walking routes.
- Walking- and cycling-to-work campaign, using written health materials distributed to employees, can increase walking (but not cycling) to work and the promotion of active commuting as a part of a more extensive campaign.
- Workplace health screening.
- Workplace counselling whether alone or as part of a multi-component intervention.
- Employee-designed interventions, that include written health and physical activity information, active commuting, stair climbing, led walks, fitness testing and counselling.

On the other hand the success of some interventions is less clear:

- While short-term stair use initially increases as a result of stair walking interventions that use posters or signs encouraging their use, it often returns to pre-intervention levels over time. There is some evidence to suggest that distribution of written material of health benefits can increase stair use.

- A group-led exercise session showed improved short-term physical activity level but this was not sustained.
- Examinations of the effectiveness of health messages delivered via e-mail or workshops were inconclusive.

### *Workplace characteristics*

There was no evidence that the type of workplace had an influence on the effectiveness of interventions, or that some interventions would be more appropriate for different population



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sectors (by gender, ethnicity, or for temporary/casual workers). Studies did suggest that workplace physical activity interventions are more effective for sedentary workers, and that self-directed interventions and longer-term (over six months) interventions may be more effective. Further, while there was no evidence to support requiring employee involvement in implementation and review, there is evidence to support the effectiveness of employee involvement in the planning of intervention design.

### Barriers and Facilitators

Employee-cited barriers fell into two categories: negative perceptions (e.g., views about stair climbing messages,

perceived time/fitness constraints) and physical barriers (e.g., location/absence of showers, location of elevators compared to stairs, lack of safe bicycle routes).

Employee-cited facilitators included focusing on the physical environment (improvement in facilities and convenience of location), incentive schemes and flexible work practices. A motivating factor cited in one study was that the intervention was worthwhile and enjoyable.

No employer barriers or facilitators were cited.

### More Info...

Dugdill, L., Brett, A., Hulme, C., McCluskey, S., & Long, A. F. (2008). Workplace physical activity interventions: a systematic review. *International Journal of Workplace Health Management*, 1, 20 – 40.

Cragg, S., Wolfe, R., Griffiths, J.M., & Cameron, C. (2007). *Physical Activity Among Canadian Workers: Trends 2001 – 2006*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.

Canadian Fitness and Lifestyle Research Institute. (2008). *Working to Become Active: Increasing Physical Activity in the Canadian Workplace*. Available at <http://www.cflri.ca/eng/statistics/surveys/capacity2007-08.php>

### What's happening in Canada?

Among Canadian companies with 50 or more employees:

- 45% provide information and promotional materials about workplace policies and programs to support physical activity
- 80% report inadequate space and 63% report lack of on-site facilities (such as showers and bicycle racks) as physical activity program barriers
- 81% state that physical activity behaviour of employees is a matter of interest and responsibility for both the employee and the employer
- 66% state that employees have little or no input in the development of workplace physical activity policies, programs and opportunities
- 30% report that the company itself is responsible for managing physical activity programs at work, while the same proportion states that it is a combination of an employer/employee committee

Among Canadian workers:

- 34% report that constant tight deadlines at work and 42% report that lack of time due to work are important barriers to physical activity
- 55% report that their employers are not supportive of physical activity
- 32% report that their employers use bulletin boards or newsletters to make fitness and health information available
- 28% report that their employers offer information on how to become more active
- 26% report their employers offer physical activity seminars or workshops

### What have we learned?

- *Establish walking promotions using pedometers, and supported by mapped walking routes, diaries and self-monitoring.*
- *Support employees through counselling, goal setting and assistance with self-directed physical activity programming.*
- *Promote active commuting to the workplace.*
- *Support initiatives with messaging about related health benefits.*
- *Involve employees in planning programs.*
- *Provide supportive facilities (e.g., safe routes, showers, bicycle racks).*
- *Ensure that interventions are perceived as worthwhile and enjoyable.*
- *Consider supporting employee efforts with incentives and work flexibility.*