



# Construction Fact Sheet

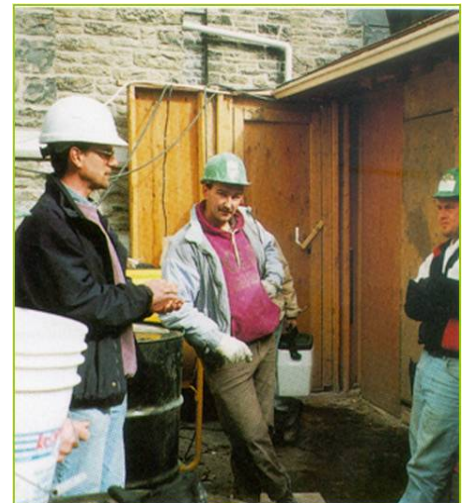
## Ergonomic Change Teams

### The Problem

- Musculoskeletal disorders (MSD), such as back pain, are the biggest cause of lost time and disability in the construction sector.
- Construction work is heavy and the fluid nature of the worksite can make it difficult to make changes to reduce loads on the body

### Possible Solutions

- Participatory Ergonomics (PE) is a process that involves workers and supervisors working together to identify, and change highly demanding tasks and activities to reduce high loads on the body: working smarter.
- Bringing people together to solve a problem can improve the solution and increase its chance of being used.
- One form of PE is the creation of workplace-based cross-functional Ergonomic Change Teams (ECTs).
- PE usually requires a champion to form and facilitate the cross-functional team.
- The ergonomic process includes identifying hazards, prioritizing jobs for improvement, evaluating concerns using ergonomic tools and techniques, implementing and evaluating how well the change is working, and performing follow-up evaluations to see if new problems have been created.
- ECTs are responsible for running the ergonomic process. They require:
  - participation and consultation,
  - management support,
  - adequate resources,
  - education and training



## Possible Tools

- *The Participatory Ergonomics Implementation Blueprint* developed by Richard Wells and his colleagues in 2001 is a recommended resource. This describes steps to form and maintain ergonomics processes that can improve work design and thus reduce injury risk, improve comfort, and optimize quality and productivity.  
[http://www.cre-msd.uwaterloo.ca/Documents/Products/ergonomic\\_blueprint\\_2003.pdf](http://www.cre-msd.uwaterloo.ca/Documents/Products/ergonomic_blueprint_2003.pdf)
- Ontario Health and Safety Council of Ontario's (OHSCO) *MSD Prevention Guideline for Ontario*  
<http://www.wsib.on.ca/wsib/wsibsite.nsf/Public/PreventMSD>
- Institute for Work & Health's: *Reducing MSD hazards in the workplace: A guide to successful participatory ergonomics programs*.  
<http://www.iwh.on.ca/pe-guide>

## Benefits

- PE interventions have a positive impact on musculoskeletal symptoms, reduce injuries, and reduce workers' compensation claims and lost days from work.
- PE enhances communication and improves team members' perceptions of the program usefulness.

## References

Cole D, Rivlis I, Van Eerd D, Cullen K, Irvin E, Kramer D. *Effectiveness of participatory ergonomic interventions on health outcomes: A systematic review*. Toronto: Institute for Work and Health; 2004.

Van Eerd D, Cole D, Irvin E, Mahood, Q, Keown K, Theberge N, Village J, St. Vincent M, Cullen K, Widdrington H. *Report on process and implementation of participatory ergonomic interventions: A systematic review*. Volume 1. Toronto: Institute for Work and Health; 2008.