# YORK UNIVERSITY

# **Ergonomics/Musculoskeletal Disorder Prevention Program**

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### **Table of Contents**

I. Objective	1
II. Program Review	1
III. Philosophy	1
IV. Provincial Legislation, Standards, Guidelines	1
V. Roles and Responsibilities	2
CSBO	
DOHS	2
EWO	2
Department Heads, Executive Officers and HSOs	2
Information technology support groups (academic and non-academic)	2
JHSC members and HSRs	3
Procurement Services	3
Supervisors	
Workers	
VI. Training	3
VII. Procedures	
Musculoskeletal Discomfort Response Procedure	4
Appendix	9
Ergonomics/MSD Prevention Resources on the DOHS website	

### Acronyms

CSBO - Campus Services and Business Operations

DOHS - Department of Occupational Health and Safety

EWO - Employee Well Being Office

HSO - Health and Safety Officer

HSR - Health and Safety Representative

JHSC - Joint Health and Safety Committee

MSD - Musculoskeletal Disorders

RTW - Return to work

SAIR - Supervisors Accident Investigation Report

WSIB - Workplace Safety and Insurance Board

# I. Objective

To continuously improve the ergonomics of our workplace.

# II. Program Review

This program will be reviewed once every two years in consultation with the Joint Health and Safety Committees (JHSCs) and Health and Safety Representatives (HSRs).

# III. Philosophy

An ergonomic workplace is one where human physical and cognitive abilities and differences are taken into consideration so that interactions among workers and other elements of the workplace (equipment, processes, materials, etc) are optimized.

Ergonomics and accessibility for persons with disabilities have much in common; as one of the goals of both fields is to increase the usability of systems for as diverse a population as possible. Often one solution does not fit all.

Improving ergonomics will increase:

- employee comfort
- morale
- productivity

and decrease:

- absenteeism
- barriers due to disability
- injuries
- mistakes ("human errors")
- turnover

Two major classes of injuries can be reduced by improved ergonomics:

- 1. Injuries resulting from accidents caused by human error
- 2. Musculoskeletal disorders (MSDs)

Musculoskeletal disorders (MSDs):

- are also known as Repetitive Strain Injuries, Repetitive Stress Injuries or Cumulative Trauma Disorders.
- are painful conditions that are the result of muscle, tendon or joint overuse
- tend to develop slowly over time but can arise from a sudden overexertion
- commonly affect the low back, neck, fingers, wrists, elbows, and shoulders

# IV. Provincial Legislation, Standards, Guidelines

1) Occupational Health and Safety Act

• inform workers about the hazards associated with their jobs and workplaces

• take every reasonable precaution in the circumstances to protect a worker. <u>http://www.labour.gov.on.ca/english/hs/pubs/ohsa/ohsag\_part3.php</u> 2) Musculoskeletal Disorders / Ergonomics Ministry of Labour of Ontario, Feb 2011 http://www.labour.gov.on.ca/english/hs/topics/pains.php

3) MSD Prevention: Guideline for Ontario Occupational Health and Safety Council of Ontario, February 2007 Available at the link above

# V. Roles and Responsibilities

## CSBO

• build, acquire, design and install materials, equipment, furniture and workspaces in a manner that follows ergonomics guidelines

### DOHS

- coordinate/provide training
- develop procedures and resources for stakeholders to use to minimize MSD risks (see Appendix)
- provide technical expertise to address specific MSD hazards and other ergonomics issues, when requested
- communicate trends and statistics

## EWO

- communicate with treating practitioner(s) and/or coordinate 3<sup>rd</sup> party assessments for clarification of accommodation needs
- collaborate with stakeholders to facilitate RTW or accommodation
- receive and process SAIRs and communicate with WSIB as required
- compile and submit injury and disability-related statistics to report to the community

# **Department Heads, Executive Officers and HSOs**

Have processes in place:

- so that supervisors know what to do if they recognize MSD hazards or if a worker raises a concern
- to identify and control any MSD hazards related to poor design of tools, equipment, workstations or work practices
- to acquire, design and install equipment, software and workspaces that meet ergonomics guidelines
- to provide workers with the equipment and training they need to reduce their exposure to MSD hazards

### Information technology support groups (academic and non-academic)

• acquire, design and install equipment and software in a manner that follows ergonomics guidelines (e.g. web pages, classroom technology, desktop hardware, voice/data headsets, finance/human resources systems, student information systems, e-mail programs, etc)

### JHSC members and HSRs

- look for MSD hazards during workplace inspections
- make recommendations to the employer on how to monitor, eliminate, or reduce exposure to MSD hazards.
- review MSD related trends and statistics

### **Procurement Services**

• acquire materials and equipment in a manner that follows ergonomics guidelines

### **Supervisors**

- respond as outlined in this program to workers' MSD concerns
- ensure that workers receive required training
- make workers aware of MSD hazards in their workplaces and how they can be addressed
- look for MSD hazards during workplace inspections, job task analyses, and when reviewing injury reports
- reinforce proper working techniques
- encourage and support workers so that they can take their scheduled breaks
- check that workers have adjusted their workstations to suit themselves and their work, and provide help as needed
- be aware of MSD warning signs and indicators
- encourage workers to report MSD concerns
- involve workers in identifying controls for MSD hazards
- provide workers with regular updates on the status of controls that cannot be implemented right away
- follow up with workers after controls have been implemented to determine if the controls are helping

### Workers

- attend required training
- report MSD hazards and concerns to their supervisors
- take scheduled breaks and take advantage of opportunities to change postures or relax muscles
- move around and occasionally change positions
- offer suggestions to improve working conditions and procedures
- be aware of symptoms of MSDs and report them early if they occur
- ask questions if information and instructions are not understood
- use proper working techniques
- use the equipment and tools provided to reduce exposure to MSD hazards
- know how to make adjustments to equipment and workstations to suit the work performed

### VI. Training

Торіс	Target Audience
1. Computer Workstation Safety	Anyone who spends more than an hour per day on a
	computer
2. Back/Material Handling Safety	Anyone who handles heavy materials or could potentially
(Refresher version also offered)	work in awkward postures
3. Back Safety Supplement for	Same as "Back Safety"

Computer Users	Prerequisite: Computer Workstation Safety
4. MSD Prevention for Supervisors	HSOs, Supervisors of the target audiences above
(under development)	

Dates of course offerings are online at: http://www.yorku.ca/ergo/ergo-workshops.htm

### VII. Procedures

### **Musculoskeletal Discomfort Response Procedure**

Revised Feb 22, 2011 (Check the DOHS website for most current version.)

NOTE: The links in the procedure on the following pages do not work. To access the links, go to the DOHS website at the link below.

http://www.yorku.ca/dohs/ergo-discomfortassess.html



#### ERGONOMICS Musculoskeletal Discomfort Response Procedure

Revised Feb 22, 2011

This procedure is designed to assist an employee experiencing musculoskeletal discomfort at work, in order to prevent a disabling injury. An overview is in the <u>Appendix</u>.

#### **STEP 1: Employee preventive actions**

**Example:** An employee reduced their discomfort by varying activities more frequently and making some ergonomic adjustments to a frequently used piece of equipment.

**Important:** While undertaking and/or scheduling the steps below, the employee should keep their supervisor up to date on their progress. In addition, the employee should not delay proceeding to Step 2 if the discomfort:

- is not improving, or
- is making activities difficult, or
- came on suddenly, as opposed to gradual onset

The employee may be able to address the concern on their own. Examples:

- consulting with a health care professional (HCP)
- improving their physical fitness (healthy eating, exercise, etc)
- reviewing ergonomics/MSD prevention information (see <u>Appendix</u>)
- attending an ergonomics/MSD prevention workshop (see <u>Appendix</u>)

Before discussing the concern with their supervisor or an HCP, the employee will find it helpful to review the **Musculoskeletal Discomfort Description** (see <u>Appendix</u>). This worksheet will help the employee prepare for a meeting/appointment, as it contains many of the questions likely to be asked by a supervisor or an HCP.

#### 1.1. Computer Use

The **Computer User Self-Assessment Checklist** (see <u>Appendix</u>) will help an employee address discomfort related to computer use. How to complete this checklist is discussed in the **Computer Workstation Safety Workshop** (see <u>Appendix</u>).

#### **STEP 2: Supervisor/Department preventive actions**

**Example:** A supervisor provided an alternate tool to reduce the discomfort associated with a particular activity.

If the employee is not able to resolve the concern on their own, s/he should discuss the concern and possible corrective measures with their supervisor as soon as possible. Supervisors are encouraged to discuss the concern with their managers, if additional advice is required. Other groups and individuals who are also available for consultation by all stakeholders throughout this process include:

- Department of Occupational Health and Safety (DOHS)
- Employee Well-Being Office (EWO)
- Health and Safety Officers (HSOs)
- Joint Health and Safety Committee (JHSC) members
- Health and Safety Representatives (HSRs)

#### 2.1. Supervisor's Accident Investigation Report (SAIR)

Assistance will be provided regardless of whether the discomfort is due to work-related or non-work-related causes.

However, if the employee believes that the discomfort is due to a work-related injury/illness ("injury"), they should make their supervisor aware of this belief, as a <u>SAIR</u> may need to be completed **in addition to the steps outlined below**.

If the employee is unsure of the cause of their discomfort, they may find it helpful to seek advice from a health care professional, before reporting it to their supervisor as a work-related injury.

After investigating, if the supervisor decides that the discomfort could be due to a work related injury, a SAIR **should** be completed. NOTE: a SAIR **must** be completed if the employee has sought healthcare or missed time from work for a work-related injury.

Questions about whether or not a SAIR should be completed can be addressed by EWO. More information about the SAIR is available on their website (under the WSIB heading):

- EWO information for employees
- EWO information for managers

#### 2.2. Computer Use

The **Computer Workstation Checklist** (see <u>Appendix</u>) is a resource for supervisors or area designates (e.g. HSOs) to identify and correct basic ergonomics problems for discomfort related to computer use.

The investigation will be easier if the employee completes the worksheets mentioned earlier ahead of time:

- Musculoskeletal Discomfort Description (see Appendix)
- Computer User Self-Assessment Checklist (see Appendix)

#### 2.3. Non-Computer Use

For discomfort that is NOT related to computer use, **Responding to Reports of Musculoskeletal Discomfort** (see <u>Appendix</u>) is a resource for supervisors or area designates (e.g. HSOs) to generate ideas on how to prevent injury or to prevent aggravating a pre-existing condition.

#### 2.4. Supervisor/Department follow up

If changes have been made to reduce the discomfort, follow up is important to see if the changes helped.

The supervisor (or other designated individual) should check in with the employee the

http://www.yorku.ca/dohs/ergonomics/discomfortassess.htm

day after changes were made.

Depending on the outcome of this initial follow up, daily or weekly follow ups should be scheduled until the concern is resolved.

The **Ergonomics Change Evaluation Worksheet** (see <u>Appendix</u>) can be used for this purpose.

Proceed to Step 3 in the following situations:

- no ergonomics problems can be identified
- uncertainty about how to resolve identified ergonomics problems
- the employee's discomfort is not improving

#### **STEP 3: DOHS assessment**

If a more in depth investigation is required, proceed as follows:

3.1. The worker, supervisor or HSO submits an **Ergonomics Consultation Request** (see <u>Appendix</u>) to DOHS, along with all the applicable worksheets mentioned previously.

3.2. DOHS investigates with the employee and the supervisor or HSO and possible interventions are discussed.

3.3. If supervisor follow up is required (e.g. to order new equipment), DOHS provides written recommendations to the supervisor, HSO and/or appropriate senior manager.

3.4. The employee completes an **Ergonomics Change Evaluation Worksheet** (see <u>Appendix</u>). The worksheet is returned by the employee or their supervisor within a mutually agreed upon time period (usually 2 weeks).

3.5. If the **Ergonomics Change Evaluation Worksheet** (see <u>Appendix</u>) indicates that the problem has not been resolved, steps 3.2-3.5 are repeated. In addition, DOHS will notify EWO to prepare for the possible need for a workplace accommodation. More information about accommodation is available on their website (under the "Return to Work and At Work Accommodation" heading):

- EWO information for employees
- EWO information for managers

#### **APPENDICES (Musculoskeletal Discomfort Response Procedure)**

A.1) Overview (PDF)

A.2) Ergonomics/MSD Prevention Information

A.3) Workshop Schedule

#### A.4) Computer-Related Resources/Worksheets/Checklists/Forms

DOC documents can be saved and completed on-line. Use PDFs for printing. For the worker: A.4.1) <u>Musculoskeletal Discomfort Description (DOC) (PDF)</u>

A.4.2) <u>Computer User Self-Assessment (PDF)</u>

For the supervisor/HSO: A.4.3) <u>Computer Workstation Checklist (DOC) (PDF)</u> For the worker after changes are made: A.4.4) <u>Ergonomics Change Evaluation (DOC) (PDF)</u> For the worker or supervisor/HSO: A.4.5) <u>Ergonomics Consultation Request (DOC) (PDF)</u>

#### A.5) Non-Computer Resources/Worksheets/Checklists/Forms

For the worker: A.5.1) <u>Musculoskeletal Discomfort Description (DOC) (PDF)</u> (same as Appendix 4) For the supervisor: A.5.2) <u>Responding to Reports of Musculoskeletal Discomfort (PDF)</u> For the worker after changes are made: A.5.3) <u>Ergonomics Change Evaluation (DOC) (PDF)</u> (same as Appendix 4) For the worker or supervisor: A.5.4) <u>Ergonomics Consultation Request (DOC) (PDF)</u> (same as Appendix 4)

# Appendix

### **Ergonomics/MSD Prevention Resources on the DOHS website**

Revised Mar 11, 2011 (Check the DOHS website for most current version.) **NOTE: The links on the following pages do not work. To access the links, go to the DOHS website at the link below.** 

http://ergo.info.yorku.ca/site-index/



#### ERGONOMICS Site Index

#### **Ergonomics Information and Services**

Revised Mar 11, 2011

A-D | E-G (includes Forms) | H-L | M | N-R | S-Z

Activity Improvement Worksheet, see Forms Arthritis Or Repetitive Strain Injury?

Back Safety Poster, see Posters Back Safety Tips Back Safety Information Sessions

Chairs, see Sitting <u>Computer Use</u>, Injury Prevention For Computer Users <u>Computer Use</u>, Injury Prevention For Computer Users Overview (Pamphlet) Computer User Self-Assessment Checklist, see <u>Forms</u> Computer Workstation Ergonomics Poster, see Posters <u>Computer Workstation Safety Overview (PPT)</u>

Employee Ergonomics Consultation Request, see Forms Ergonomic Change Evaluation Worksheet, see Forms Eye Discomfort And Office Work Eyes, Bifocals And Computer Use

#### Forms, Checklists, Worksheets

Activity Improvement Worksheet Computer User Self-Assessment Checklist: Graphic Version (PDF) Discomfort Diagram (PDF) Employee Ergonomics Consultation Request (DOC) (PDF) Ergonomics Change Evaluation Worksheet (DOC) (PDF) Musculoskeletal Discomfort Description (DOC) (PDF) Responding to Reports of Musculoskeletal Discomfort (PDF) Sitting, Computer Workstation Chair Self-Assessment Checklist (PDF) (Supervisor's) Computer Workstation Checklist (DOC) (PDF)

Healthcare, Questions To Ask Your Doctor About Musculoskeletal Disorders

<u>Keyboard Platform Operating Instructions</u> <u>Keyboard Positioning</u> <u>Keyboard-Related Discomfort</u> Keyboard Shortcuts, see Mousing, Using Windows Without A Mouse

Lighting, see Eye Discomfort And Office Work

Manual Material Handling, see Back Safety Monitors, see Neck Pain And Office Work <u>Mouse Bridge</u> <u>Mousing, Towards Pain-Free Mousing</u> <u>Mousing, Using Windows Without A Mouse</u> <u>Musculoskeletal Discomfort Response Procedure</u> <u>Musculoskeletal Disorders, Repetitive Strain Injuries</u>

#### Neck Pain And Office Work

Paper Documents, see Neck Pain And Office Work Posters

- Back Safety
- Computer Workstation Ergonomics

Pregnancy And Ergonomics Procedure, Musculoskeletal Discomfort Response Procedure

Repetitive Strain Injuries (RSIs), see Musculoskeletal Disorders (MSDs) Resting While You Work, see Work Organization

Sitting

- Adjusting Your Office Chair
- Borgo Jendra Adjustment Videos
- Borgo Chair Operating Instructions (PDF)
- Computer Workstation Chair Self-Assessment Checklist, see Forms
- Ergonomics Considerations For Computer Workstation Chairs
- Operating The Controls Of Your Office Chair

Sitting And Back Pain

(Supervisor's) Computer Workstation Checklist, see Forms

Telephone, see Neck Pain And Office Work Typing, see Keyboard

Work Organization, Resting While You Work Wrist Braces And Splints

Send questions and comments regarding this page to mikepapa@yorku.ca