

Building Fair and Productive Workplaces

Labour











Ergonomics Regulatory Requirements

Winston Eng HRSDC - Labour Program

Part of Hazard Prevention Program (HPP) Regulation

Part XIX of the Canada Occupational Health and Safety Regulations "Hazard Prevention Program" (A program for eliminating or minimizing risk to employees in the work place)

Ergonomics requirements introduced as amendments to the HPP Regulation

Agenda

- Introduction to Ergonomics and Musculoskeletal Injury (MSI)
- Overview of Ergonomics-related hazards amendments
- A process for implementing the regulatory requirements
 - Guidance materials and tools
- Summary

HRSDC Labour Program Definition

Ergonomics is the scientific study of the relationship between people and their working environment with a view to improving safety, ease of action and efficiency

Musculoskeletal Injury (MSI)

 MSI is an injury or disorder of the musculoskeletal system (tendons, blood vessels, ligaments, nerves, joints, spinal discs, and related soft tissue) that may be caused or aggravated by

> Coracoacromial ligament

> > Humerus-

Tendon of brachialis muscle

Brachialis

muscle

hazards in the workplace.

The musculoskeletal system is made up of

ligaments, tendons, and cartilage

*ADAM

muscles, bones,

MSI (*cont'd*)....

- MSI does **not include** injuries that result directly from:
 - falling, slipping, tripping
 - being struck by an object or knocked against something
 - being caught in or on something
 - being in a motor vehicle accident

MSI (*cont'd*)....

- MSI is also referred to as
 - Musculoskeletal disorder (MSD)
 - Cumulative trauma disorder (CTD)
 - Repetitive strain Injury (RSI)
 - Occupational overuse syndrome
 - Sprains and strains

Musculoskeletal Injury (MSI)

 For workplaces under federal jurisdiction, MSI accounts for approximately 30% of all workrelated injuries accepted for compensation.



19.2 Implementation Plan

The employer shall ensure that

- Ergonomics-related hazards are identified, assessed and are eliminated or reduced – as much as is reasonably possible
- Any person assigned to identify & assess has the necessary instruction and training.

(Qualified person – because of knowledge, training and experience, is qualified to perform that duty)

19.4 Hazard Identification & Assessment

Take into account ergonomics-related factors such as:

- Physical demands of the work activities, the work environment, the work procedures, the organization of the work, the circumstances in which the work activities are performed
- The characteristics of materials, goods, persons, animals, things and work spaces and the feature of tools and equipment

19.5 Preventive Measures

Hierarchy for implementation:

- Eliminate
- Reduce
- Personal protective equipment, clothing, devices or materials
- Administrative procedures (e.g. employee rotation)

19.5 Preventive Measures (con't)...

Engineering controls – may involve mechanical aids, equipment design or redesign that take into account physical attributes of the employee

Administrative procedures, such as the management of hazard exposure and recovery periods and the management of work patterns and methods

19.5 Preventive Measures (con't)...

Address ergonomics-related hazards when change in work environment or to work duties, equipment, practices or processes.

The employer shall ensure that any person assigned to implement ergonomics-related prevention measures has the necessary instruction and training

19.7 Program Evaluation

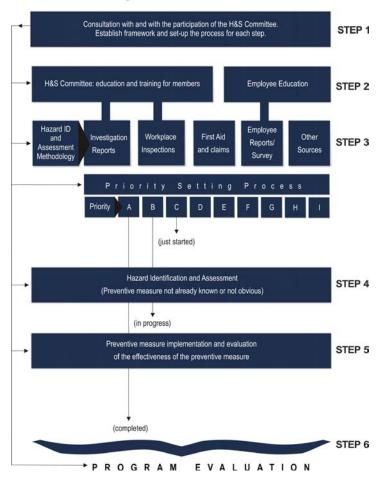
Evaluation, including ergonomics-related components based on 19.7(2) (a)-(g):

 First aid – including records and statistics relating to ergonomic-related first aid and injuries;

19.8 Reports and Records

- If a program evaluation has been conducted under section 19.7, prepare a program evaluation report
- Keep the program evaluation report readily available for six years after the date of the report
- ** Update: No requirement to send program evaluation report to minister.

Hazard Prevention Program for Ergonomics Related Hazards



Guide on the Prevention of Musculoskeletal Injury

- Guide on the whole process
- Highlights aspects of the hazard prevention program that are specific to ergonomic-related hazards
- Makes references to examples of tools/publications that may be utilized

Guide on the Prevention of Musculoskeletal Injury (con't)

- Common ergonomics-related hazards such as
 - Physical Demands of Work Activities
 - Work Environment
 - Work procedures and the Organization of Work
 - Circumstances in which work activities are performed

Guide to Employee Education on Musculoskeletal Injuries

- Booklet that employers may use to teach employees about ergonomics, with a focus on MSI prevention
- It outlines:
 - Regulatory requirements specific to ergonomics-related hazards
 - Program approach to MSI prevention
 - Components of the MSI prevention program
 - Common ergonomics-related hazards in the workplace
 - The employees' duty to report ergonomics-related hazards

General Guide for Identifying Ergonomics-Related Hazards

- Guide for employers who require some assistance in identifying ergonomics-related hazards
- To be used by someone educated and trained in ergonomics-related hazards (COHSR - 19.6(1))
- Can be used for workplace inspections, assessment, and investigations

GRIP FORCE		CHECK HERE IF REQUIRED AT THIS JOB/TASK	NOTES
PINCH GRIP	Pinch gripping unsupported objects weighing 1 kg or more per hand for more than 2 hours total per day. OR Pinch gripping with a force of 2 kg or more per hand for more than 2 hours total per day.		
POWER GRIP	Power gripping unsupported object weighing 5 kg or more per hand for more than 2 hours total per day. OR Power gripping with a force of 5 kg or more for more than 2 hours total per day.		

Employee Input on Potential Ergonomics- Related Hazards

- May be used to obtain input on the physical demands of job/task
- To be effective, use after employees have been trained in accordance with paragraph 19.6(1) COHSR
- This tool alone is not enough to determine if ergonomics-related hazard controls should be implemented and should be used with other hazard identification methods

MSI HAZARDS – AWKWARD/FIXED POSTURE			
Awkward Posture	Work with neck bent forward (chin close to chest).		
(Do you frequently assume these postures and/or hold them for a	Work with neck bent to one side (ear close to shoulder).		
long time?)	Work with neck twisted to either side/chin close to shoulder.		
MAN ST	Work with neck bent back.		
22	Work with neck bent forward and chin out (head forward).		
- B	Work with hand(s) at/or above the head.		
THE TOWN	Work with elbow(s) at/or above the shoulder.		
1.) -	Work with elbows/hands behind the body.		

Guide to Address Ergonomics-Related Hazards with Computer Workstation

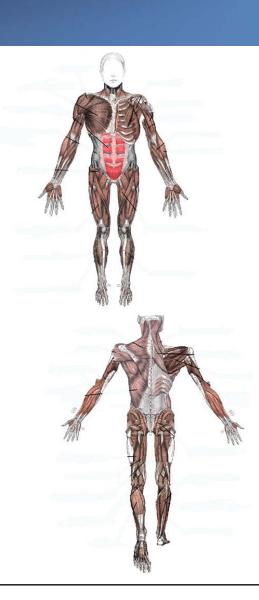
- Checklist format
- Adopted from the Manitoba Labour and Immigration

Guide to Investigating Musculoskeletal Injuries

- Employers who require guidance with the investigation of MSI
- Person who is appointed to investigate a MSI related hazardous occurrence is required to be trained in accordance with paragraph 19.6(1)(a) COHSR

Guide to Investigating Musculoskeletal Injuries (con't)

- Interactive guide for the internet is being developed with CCOHS
- Image of a human body
- 'click' on problem area
- 'click' on task
- Gives a list of possible solutions



Checklist for the Evaluation of an Ergonomics- Related Hazard Prevention Program

- Effectiveness of Ergonomics-related components can be evaluated when evaluating the HPP as a whole.
- For employers who would like some assistance, they can use the list of sample questions to evaluate the ergonomics-related hazards parts of the HPP

NO	IN DISCUSSION/ DEVELOPMENT	YES, PARTIALLY/ SOMETIMES	YES, FULLY/ ALWAYS			
COMMENTS:						
COMMENTS:						
		DEVELOPMENT DEVELOPMENT	NO DEVELOPMENT PARTIALLY/ SOMETIMES			

Summary

- Consistent with other MSI programs such as MOL, WCB, OSHA
- CCOHS, MOL, OSHA, WCB/WSIB, OHCOW, CSAO, THSAO, and IAPA are examples of other ergonomic resources everyone can use.
- Implementation steps to prevent/reduce ergonomicsrelated-hazards may take time to tell if it is effective.
- Tools/checklist and guidance materials provided are optional (can customize)

Questions?

- Health and safety associations
- HRSDC Labour Program toll free number:

1-800-641-4049