

# Identifying Jobs With Risks for Musculoskeletal Injury

Module #1

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**SAFE  
WORK**



**EVERYONE'S  
RESPONSIBILITY**

## MODULE #1

### IDENTIFYING JOBS WITH RISKS FOR MSI

#### Introduction

Why do some workers suffer a musculoskeletal injury (MSI) i.e. carpal tunnel syndrome, or a herniated intervertebral disc, and others don't? Simply put, every working body is different. Different workers can have different reactions to the same risks for MSI. For example two workers performing the same job on an assembly line could get different injuries from performing the same job. When a worker suffers a MSI, their body is experiencing a failure due to the presence of a risk for MSI. For MSIs, this failure generally takes the form of discomfort or pain in the muscles, tendons or joints. Just as exposure to a chemical hazard increases the chance of injury or illness, risks for MSI increase the chance a worker's body will experience a failure. Exposure to heavy lifting does not mean that a back injury will definitely occur, but it does *increase the chance* of it happening.

MSIs do not happen randomly, they occur as the result of exposure to a hazard. If a worker suffers a MSI, the potential exists for that same worker, or another worker brought into perform that work, to suffer a second injury unless changes are made to the job.

## **Rationale**

Uncontrolled risks for MSI are hazardous and may be costly. Hazardous due to the potential to cause an injury, with costs dependant on the length of time required for a worker to recover. Additional costs occur when the worker's ability to perform at their usual level of productivity is compromised due to an unreported injury. Only after jobs with risks for MSI have been identified can they be analyzed [*Module 2*, (<http://www.gov.mb.ca/labour/safety/pdf/ergomodule2>) *Module 3*] (<http://www.gov.mb.ca/labour/safety/pdf/ergomodule3>), and the hazards controlled so as to reduce the risk of injury [*Module #4* (<http://www.gov.mb.ca/labour/safety/pdf/ergomodule4>)].

## **Resources Required**

- Risk for MSI education
- Company injury statistics
- Physical discomfort survey (<http://www.gov.mb.ca/labour/safety/pdf/a.pdf>)

## **Step-by-Step Procedure**

Identifying jobs that contain risks for MSI involves reviewing records, asking specific questions, and directly observing jobs to see if they contain risks for MSI.

1. The first and most important step in identifying jobs with risks for MSI is learning what a risk for MSI is, and what it looks like. This can be achieved through a variety of means:
  - Training (<http://www.gov.mb.ca/labour/safety/training.html>) - The Workplace Safety and Health Division offers full-day educational courses on

Musculoskeletal Injuries. Local safety organizations and post-secondary institutions also offer ergonomic-type education.

- Research - Search on-line for information; review trade publications for articles on Musculoskeletal injuries; and visit the Workplace Safety and Health Divisions website at: <http://www.gov.mb.ca/labour/safety/> for more resources

2. Reviewing the injury records is a straightforward method of identifying jobs with risks for MSI that require further investigation. Look for sprain/strain type injuries from overexertion or from overuse. Jobs that cause sprain/strain injuries typically contain risks for MSI.

3. The most effective method of identifying jobs with risks for MSI is to directly observe the work being done, and talk

to workers. Ask workers which jobs are particularly difficult, or if there is a time when they are tired or sore from work. Examples include an end of the month rush, or when handling a particular material. Do a walk-around and look for risks for MSI, such as: workers bending or twisting from the waist, performing highly repetitive tasks, showing strain in their face, and working in awkward postures or with

### Physical Discomfort Survey

ID # \_\_\_\_\_

PHYSICAL DISCOMFORT SURVEY

Please note: 'pain' may include aches, stiffness, numbness, tingling or burning sensations

**ELBOWS**       right  left

**How often?**

Never

Occasionally

Often

Always

**How Much?**

No Discomfort

Discomfort

Pain

Severe Pain

their elbows away from their body for prolonged periods.

#### 4. Performing a Physical Discomfort Survey

<http://www.gov.mb.ca/labour/safety/pdf/a.pdf>) is another method of collecting musculoskeletal injury related feedback from the workforce. The survey contains a picture of a body that asks the worker to indicate where they are feeling discomfort or pain. This information can be used to identify jobs which are causing workers musculoskeletal problems. Since most MSIs occur over time, they follow a pattern of development. The worker first experiences discomfort, which can then develop into pain, eventually leading to the worker taking time off work to heal. Jobs with reports of pain should be marked for assessment. Those jobs in which severe pain has been reported should be analyzed immediately.

*For more detailed instructions consult the Guideline "Ergonomics: A Guide to Program Development and Implementation" (<http://www.gov.mb.ca/labour/safety/ergoguide.html>)*

### **Self-Checks**

The purpose of self-checks is to ensure that the process has been completed accurately and completely. The self-checks for identifying jobs with risks for MSI are as follows:

- Jobs that have a history of injuries have been marked for further assessment.
- Complaints from workers have been noted & their jobs marked for further assessment.

- Jobs with high turnover have been identified as having possible risks for musculoskeletal injury.

### **The Next Step(s)**

Several things can be done with a list of jobs containing risks for MSI.

1. Determine the jobs that should be addressed first. Jobs with a recent injury, or a history of MSIs should be assessed prior to jobs that contain risks for MSI, but have not yet caused an injury.
2. Perform an Ergonomic Risk Assessment (ERA) [*Module #3* (<http://www.gov.mb.ca/labour/safety/pdf/ergomodule3>)] for those jobs that have been identified as having risks for MSI. Determine and implement appropriate control measures for those risks for MSI [*Module #4* (<http://www.gov.mb.ca/labour/safety/pdf/ergomodule4>)].
3. Educate those workers whose jobs contains risks for MSI. They should be aware of the potential MSIs they can suffer, how to avoid them, what to do should they experience one, and who, internally, to make aware of it.