



## DEVELOPING A CODE OF PRACTICE FOR MANUAL HANDLING

This document can be used as a guide to identify areas of concern for musculoskeletal injuries (MSIs) and to help workplaces meet the requirements of subsection 50(2) of the *Occupational Health and Safety (OHS) Act*.

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## GLOSSARY

### Body Mechanics

The study of proper body movement to prevent and correct posture problems, reduce stress and enhance physical capabilities.

### Competent

Defined in *Regulation 91-191* of the New Brunswick *OHS Act* as:

- (a) qualified, because of such factors as knowledge, training and experience, to do assigned work in a manner that will ensure the health and safety of persons,
- (b) knowledgeable about the provisions of the Act and the regulations that apply to the assigned work, and
- (c) knowledgeable about potential or actual danger to health or safety connected with the assigned work.

### Duration of Exposure

The amount of time the employee is exposed to the hazardous tasks during the work shift.

### Forceful Exertion

An exertion requiring a high level of physical effort. The amount of force required for an exertion to be considered forceful is relative to the size and capacity of the specific body part being used. For example, the small muscles of the hands and forearms may be injured by a relatively small force as compared to the large muscles of the legs. The risk of injury depends on the magnitude of the force being generated, relative to the tolerance of specific body injury structures, which will vary among individuals due to differences in strength capabilities.

### Frequency

The number of times a manual handling task is performed during a work shift. Production rates and quotas can be used to more easily determine the daily frequency.

### Manual Handling

Any task that requires a person to lift, lower, push, pull, carry, restrain or move an object or material.

### Musculoskeletal Injury (MSI)

An injury or disorder of the soft tissues (muscles, tendons, ligaments, blood vessels, nerves and some cartilage) caused by exposure to risk factors.

### Newton (N)

A unit of force in the International System of Units (SI). One newton is the amount of force required to give a one kilogram mass an acceleration of one metre per second. (10 newton = 1 kilogram)

### Peak Force

The maximum force level required over a specific period of time or during the completion of a specific task. For lifting tasks, the peak force is measured using the weight of the object. For pushing or pulling tasks, the force can be measured by using a force gauge. If a force gauge is not available, a luggage scale (Figure 1) or a fish scale (Figure 2) can be used as an inexpensive alternative to determine approximate push/pull force (kilograms of force).



Figure 1



Figure 2

### **Personal Protective Equipment (PPE)**

Protective clothing and other devices designed to protect an individual while in potentially hazardous areas or performing potentially hazardous tasks. PPE can include, but is not limited to, safety footwear, gloves, and eye protection. It should be noted that WorkSafeNB does not consider a back belt to be safety equipment for manual handling.



Figure 3

### **Posture**

The general position of the whole body or of any parts or joints. **Neutral posture** is the correct alignment of all the joints including the spine (Figure 3). Muscles supporting the joints are strongest in this position. **Awkward (non-neutral) posture** will compromise muscular strength and place the joint(s) at risk for injury.

### **Procurement**

The action or process of acquiring or obtaining material, property, or services at the operational level (for example, purchasing, contracting, and negotiating directly with the source of supply).

### **Repetition**

The number of similar exertions, actions or tasks performed in a specified amount of time. Repetition may be measured in terms of frequency per minutes, hours or workday (for example, 3 per minute, 25 per hour, 30 times per shift).

### **Risk Factors**

Something that increases the likelihood of a negative or unwanted outcome. The risk associated with any specific risk factor depends on the magnitude, frequency, and duration of exposure. The primary risk factors for MSIs are forceful exertions, awkward postures and repetition or frequency of tasks.

## PREFACE

**Across Canada, many workplaces are experiencing an increase in the number of MSIs. This document can be used as a guide to identify areas of concern for MSIs and to help workplaces meet the requirements of subsection 50(2) of the *OHS Act*.**

Subsection 50(2) requires employers to adopt a code of practice specified by WorkSafeNB or establish a code of practice. A code of practice is a written statement by the employer that sets out in detail measures to be taken to ensure the health and safety of an employee in certain specified circumstances. The purpose of this document is to provide an overall framework for addressing preventive and protective practices, worker participation, training, design, documentation, procurement issues and other requirements pertaining to manual handling in the workplace.

Where warranted, WorkSafeNB will require workplaces to establish codes of practice to minimize the risk of injuries due to manual handling [Subsection 50(3)]. The employer shall ensure the code of practice is readily available [Subsection 50(4)] and that employees are properly trained and adhere to the requirements of the code of practice. Unless specified by the *General Regulation 91-191*, or by a health and safety officer, the following elements should be contained in a code of practice:

### 1. An introduction including:

- a. Identification of the hazardous task(s) and/or situation(s) which may be encountered; and
- b. A description of the hazards, and their possible effect(s) on health or safety.

### 2. Identification the person(s) at risk from hazardous task/jobs/situations

Who will need to follow this code of practice?

### 3. Identification of the person(s) responsible for implementing the code of practice

Who is responsible to write and maintain the code of practice and any activities related to the code of practice?

### 4. Selecting the appropriate manual handling controls

Is the equipment appropriate for intended use, and does it meet and/or exceed workload requirements?  
Are procedures clearly laid out as to the steps to follow?

### 5. Emergency procedures and equipment

### 6. Evaluation of the code of practice and its implementation

Is the code of practice being evaluated regularly to ensure it is adequate to protect all employees?

In addition, see the following appendices:

- Appendix A – *OHS Act* (Section 50)
- Appendix B – Manual Handling Code of Practice Template
- Appendix C – Sample Manual Handling Engineering Controls
- Appendix D – WorkSafeNB *Body Discomfort Survey*
- Appendix E – Hazard Reporting by Employee
- Appendix F – References and Other Sources of Information
- Appendix G – WorkSafeNB Regional Contact Information

## COMPONENTS OF A CODE OF PRACTICE FOR MANUAL HANDLING

### 1. Introduction

The first step in developing a code of practice is to identify manual handling hazards to ensure that proper control measures are implemented to address the unsafe situations or tasks.

Workplace records can be a good source of information regarding manual handling tasks. Such information can include investigation reports, early reports of discomfort and records of incidents. These can help identify the locations, jobs and tasks where injuries from manual handling have occurred. If the employer does not have a process for reporting incidents, one should be developed and implemented (see sample *Hazard Report Form*, Appendix H).

Consider:

- The area of the workplace where the problem occurred
- The affected person's job
- The task being carried out at the time of the incident
- The part of the body affected (for example, the lower back or ankle)
- The nature of the problem (for example, a strain, sprain or tendinitis)
- The type of incident (for example, whether it was described as overexertion or a gradually developing pain)

In addition, when incident and injury records are reviewed for evidence of hazardous manual handling, it can be useful to consider:

- The frequency and severity of the injuries or incidents in the workplace that are related to manual handling tasks
- The incident rate in the area over a period of time
- The total workload

These results can be compared across departments in the organization to indicate trends in locations, jobs and tasks and can help determine tasks that may pose greater risk of injury. Other potential sources of useful information can include minutes of joint health and safety committee (JHSC) meetings and reports from previous investigations.

Hazards from manual handling tasks can also be identified using risk assessment tools. Some of these tools are very complex, while others are less complex and generally easier to use. Usually the more complex the tool and the more calculations and measurements required, the more quantitative and accurate the outcomes. These results can tell you a lot about the type of risk and level of risk for a particular task. These assessment tools usually require a great deal of training to use and interpret them correctly. Contact your regional ergonomics consultant for assistance with more comprehensive tools for risk analysis (Appendix E).

The less complex tools are typically checklists that require little training to use, and very little expertise in body mechanics. The result is typically a “risk” or “no risk” outcome, giving very little details as to the type, or level, of risk for injury. This guideline uses the ISO 11228 Ergonomics - Manual Handling (Part 1: Lifting and carrying and Part 2: Pushing and pulling) as the basis for its assessment tool for manual handling tasks.

The identification process emphasizes lifting, lowering, pushing and pulling activities by assessing the following primary risk factors:

- Forceful exertions
- Awkward postures
- Repetition or frequency of task

When quantifying the level of exposure and risk level for these risk factors, you must consider measuring peak force, weight of object, body postures, duration of exposure, and frequency.

## 2. Identification of the person(s) at risk from a manual handling hazard

Consulting employees (and their supervisors) as well as JHSC members or health and safety representatives may provide valuable insights into tasks that might be hazardous. Employees will have a good knowledge of the manual handling activities they perform and how and when they perform them. Employees will be able to identify specific tasks or actions that they find fatiguing, strenuous or difficult to perform, and they will often be able to identify potential controls. A body discomfort survey is a useful tool that can be used to gather employees' input regarding their physical comfort and any potential improvements to the task (Appendix D).

## 3. Identification of the person(s) responsible (administrator) for implementing the code of practice

Employers should assign a competent person or persons to identify the hazards and implement the manual handling code of practice. The person(s) responsible should be given the full support of the employer. All employees, including management, should be instructed to co-operate with the person(s) responsible for implementation, and to follow the code of practice. Employers also need to assign individual(s) to ensure that employees are trained, use manual handling equipment appropriately and follow procedures or other administrative controls in a manner that protects their health and safety. These tasks may be assigned to one or many individuals, depending on the size and structure of the organization.

## 4. Selecting the appropriate manual handling controls

Provided that the hazardous task cannot be eliminated, manual handling controls can be divided into two categories:

- Engineering controls
- Administrative controls

### 4.1 Engineering controls

Engineering controls (Appendix C) have a direct impact on the risk level of a particular hazard since they eliminate or minimize the hazard through changes to the workstation or equipment and/or introduction of new equipment. For this reason, these should be the first controls to be considered and implemented. In determining when engineering controls can be used, and which controls should be used, consider the following:

- Does the company have a device or equipment available, or already being used, that could be improved upon or replaced?
- Does a device or equipment exist to perform the task or help perform the task?
- Is the device or equipment appropriate for the work environment?
  - Will the device or equipment work for all manual handling tasks identified as high risk?
- If not, what percentage of task(s) will be affected by the device/equipment?
- If purchasing a new device or equipment:
  - Who will be using it?
  - What sort of training will be required?
  - Will it change the workflow? If so, how?
  - How will it be maintained? (preventive maintenance program, etc.)

## 4.2 Administrative controls

Administrative controls do not eliminate the hazard, but rather control the risk by reducing the employees' exposure to the hazard. Techniques such as training, job rotation, stretching programs and written procedures are considered administrative controls that reduce the risk of injury when the hazard cannot be eliminated or minimized through engineering controls.

### 4.2.1 Training

Training is a key step to preventing MSIs. Employees and employers should have an understanding of body mechanics, be able to recognize high-risk tasks and be able to identify the early signs and symptoms of MSIs. Employees should ensure that symptoms, near misses, hazards and incidents are reported to their supervisor so the necessary action can be taken. Employee training should include information on:

- Musculoskeletal injury (MSI) prevention
- How to properly move to avoid bending and twisting (proper body mechanics)
- Appropriate warm-up and stretch exercises
- The benefits of job rotation
- Storage techniques to avoid poor posture
- Two-person lifts
- How to safely use manual handling equipment that may be provided (forklift, pallet jack, scissor cart, etc.)
- The workplace's internal system for incident reporting

### 4.2.2 Job rotation

Job rotation is a technique that moves employees from one job to another in an organized way. This technique can be used to help minimize an employee's risk of MSIs, to help train and to alleviate boredom and complacency. For job rotation to be effective in injury reduction, the employee must be moving from a job that uses a particular set of muscles to one that uses a different set of muscles. Moving from a job that requires a lot of lifting to one that requires sitting, or perhaps static standing, might be suitable. This sort of diversity can sometimes be difficult to observe in certain work environments and job rotation schedules may require some time to perfect. Other measures for consideration include:

- **Peak demand**
  - Many activities have predictable peak periods that can cause wide variations in work demand. Increased risks from performing manual handling tasks during these peak periods can be prevented by providing sufficient people and equipment to cope during times of increased work.
- **Working hours**
  - It may be necessary to determine whether the type of manual handling task being performed is suitable for extended hours or shifts. Work that is heavy, repetitive, demanding or involves vibration, may need further consideration.
- **Special individual needs**
  - It can be particularly important to provide suitable work patterns for workers with special needs. For example, injured workers returning to work may require their work patterns to be modified.



### 4.2.3 *Warm-up and stretching program*

A warm-up and stretching program can help prepare employees for the physical work they will perform, and can provide relief throughout the day. The warm-up and stretches should be specific to the tasks being performed by the employees. A proper warm-up and stretch before physical work can help prevent injuries, reduce muscle tension, improve coordination, increase the range of motion of the joints, and promote circulation. Employees should relax while performing the stretches, avoid holding their breath, avoid over-stretching, exhale as the stretch begins, and avoid bouncing while they stretch. WorkSafeNB has a Warm-Up and Stretch poster and a Warm-Up and Stretch companion guide available online. Hard copies or full-sized posters can be ordered at no charge from the communications department at [publications@ws-ts.nb.ca](mailto:publications@ws-ts.nb.ca).

### 4.2.4 *Written procedure*

A written procedure is a step by step sequence of activities used to complete a specific task, which should be documented and shared with all affected employees. The procedure should list all PPE and other equipment required to safely complete the task as well as appropriate body mechanics such as foot and hand placement and techniques for avoiding hazardous postures.



**IT SHOULD BE NOTED THAT WORKSAFENB DOES NOT CONSIDER A BACK BELT TO BE SAFETY EQUIPMENT FOR MANUAL HANDLING.**

## 5. Emergency procedures and equipment

Situations where a code of practice must be changed, or cannot be followed, must be identified. One example is the need to perform the lift and transfer of a heavy object where equipment failure or unavailability of required equipment necessitates an alternate approach to safely carry out the task. In this instance, detailed instruction must be provided to employees and supervisors on the changes or alternate procedures that need to be followed when these circumstances occur. One such alternative might be to instruct those affected by the sudden change to delay the task until the appropriate control measures are in place.

## 6. Evaluating the code of practice and its implementation

A regular evaluation of the code of practice ensures that it remains effective. It involves finding out whether the changes made have eliminated or reduced the assessed risks, whether control strategies are continuing to be effective, and ensuring that new risks have not been introduced into the workplace as a result of implementing a control. At a minimum, the code should be reviewed annually. The evaluation should involve:

### A) Consultation with workers, supervisors and health and safety representatives involved in manual tasks

It is important to talk to a range of workers, so that different levels of experience and physical characteristics are taken into account. Information collected should include:

- Whether the controlled manual handling task or activity is resulting in reduced physical strain or difficulty (repeat *Body Discomfort Survey*)
- Where controls have resulted in new problems
- Where controls have made any existing problems worse

### B) Looking at tasks

When looking at tasks:

- Observe each changed activity to determine whether the initial risk factors have been minimized as intended
- Assess the changes to ensure no new hazards have been introduced

### C) Monitoring injury and incident reports

Monitor injury and incident reports to:

- Ensure problems have been resolved
- Check whether control strategies have been used
- Analyze injury data for any new trends in manual handling injuries

Once follow-up information is obtained, the following questions can be asked:

- Is further risk assessment necessary?
- Are control strategies operating effectively?
- Are new strategies now available to be applied?
- Does the code of practice need to be revised?

**EMPLOYERS AND SUPERVISORS NEED TO KEEP UP TO DATE WITH NEW TECHNOLOGY, INDUSTRY STANDARDS AND GUIDELINES TO REDUCE RISKS ASSOCIATED WITH MANUAL HANDLING TASKS. IF NEW PROBLEMS OCCUR, OR IF THERE IS A CHANGE TO THE WORK REQUIREMENTS OR EQUIPMENT USED, THEN A FURTHER RISK ASSESSMENT MAY BE NECESSARY.**

## Appendix A

### CHAPTER 0-0.2

## ***Occupational Health and Safety Act (Section 50)*** **Assented to August 5, 1983**

### CODE OF PRACTICE

**50(1)**An employer shall, when required by regulation, adopt a code of practice specified by regulation or establish a code of practice.

**50(2)**An employer shall, when required in writing by the Commission, adopt a code of practice specified by the Commission or establish a code of practice.

**50(3)**The Commission may

(a) require an employer to establish or adopt a code of practice if the employer has not been required by regulation to establish or adopt a code of practice,

(b) require an employer to revise a code of practice adopted or established by the employer under subsection (2), or

(c) revise a code of practice to be adopted by an employer under subsection (2).

**50(4)**A code of practice shall be posted by an employer in a prominent place at the place of employment.

1988, c.30, s.4.

## Appendix B

# Manual Handling Code of Practice Template

Company:
Workplace Address:

### Introduction

This code sets out requirements that this company will follow for the reduction of MSIs due to manual handling at this workplace.

### Administering the Code of Practice

Code of Practice Administrator:	
Phone No.:	Email:

The code of practice administrator is authorized by the employer to manage the manual handling code of practice and to ensure employees are trained in the following as required:

- Musculoskeletal injury (MSI) prevention
- How to properly move to avoid bending and twisting (proper body mechanics)
- Appropriate warm-up and stretch exercises
- The benefits of job rotation
- Storage techniques to avoid poor posture
- Two-person lifts
- How to safely use manual handling equipment that may be provided (forklift, pallet jack, scissor cart, etc.)
- The workplace's internal system for incident reporting

Employees are responsible to report all manual handling health and safety issues to their supervisor and then, if necessary, to the code of practice administrator as per the company's incident reporting process. All employees must cooperate with the administrator in the performance of the administrator's duties.

#### Initially complete:

- Step 1 - Hazard Identification
- Step 2 - Risk Identification
- Step 3 - Implementation of controls (include any procedures or other relevant documents with this code of practice)

#### Yearly evaluation

- Step 4 - Evaluation
- Step 5 - Conclusion

▼ **Step 1 - Hazard Identification**

**Complete this section for EVERY applicable task**

Administrator:		Date of assessment:	
Person(s) at risk:			
Task name/description:			
	<input checked="" type="checkbox"/>		Actual
Injury analysis	<input type="checkbox"/>	Incident frequency	
		Lost time	
		All incidents	
		Number of incidents	
		Comments:	
Employee or supervisor concerns as reported through the incident reporting process	<input type="checkbox"/>	List of concerns:	
<i>Body Discomfort Survey</i> has been administered	<input type="checkbox"/>	Comments:	

*Note: Any Discomfort Survey result over "5" should be considered a high risk for injury.*

Body Part		Neck	Left Shoulder	Right Shoulder	Left Elbow	Right Elbow	Left Wrist /Hand	Right Wrist /Hand	Back	Left Knee	Right Knee
Average Discomfort Survey Score	Actual										
	Objective										

**Summary of results:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



\_\_\_\_\_

▼ **Step 2**

- Risk Identification

▼ **Step 3**

- Implementation of Controls

<b>Risk Factors</b> <i>(Check all that apply)</i>	<b>Engineering Controls</b> <i>(The first controls to be implemented)</i> <b>(Check all that apply)</b>	<b>Administrative Controls</b> <b>(Check all that apply)</b>	<b>Emergency procedures</b> <b>(When Engineering and Administrative Controls fail or cannot be used)</b>
<input type="checkbox"/> <b>Weight &gt;25 kg<sup>1</sup></b> 	<input type="checkbox"/> Mechanical assistance (details): <hr/> <hr/> <input type="checkbox"/> Decrease the load/weight <input type="checkbox"/> Other <hr/> <hr/>	<input type="checkbox"/> Two-person lift <sup>2</sup> <input type="checkbox"/> Training in body mechanics <input type="checkbox"/> Procedure (attach to this code of practice) <input type="checkbox"/> Other <hr/> <hr/>	<input type="checkbox"/> Delay the task until controls are in place <input type="checkbox"/> Other <hr/> <hr/>
<input type="checkbox"/> <b>Lift Frequency (between 2 and 8 hours per day)</b> 1 lift/5 min = 21 kg 1 lift/min = 18.75 kg 2 lifts/min = 16.25 kg 4 lifts/min = 11.25 kg 6 lifts/min = 6.75 kg	<input type="checkbox"/> Mechanical assistance (details): <hr/> <hr/> <input type="checkbox"/> Other <hr/> <hr/>	<input type="checkbox"/> Job rotation <input type="checkbox"/> Training in body mechanics <input type="checkbox"/> Procedure (attach to this code of practice) <input type="checkbox"/> Other <hr/> <hr/>	<input type="checkbox"/> Delay the task until controls are in place <input type="checkbox"/> Implement a work/rest regime <input type="checkbox"/> Other <hr/> <hr/>
<input type="checkbox"/> <b>Initial Push/Pull &gt;320 N</b> 	<input type="checkbox"/> Mechanical assistance (details): <hr/> <hr/> <input type="checkbox"/> Appropriate wheels and bearings <input type="checkbox"/> Reduce surface friction <input type="checkbox"/> Decrease the load/weight <input type="checkbox"/> Modify the equipment (optimize handle position, etc.) <input type="checkbox"/> Other <hr/> <hr/>	<input type="checkbox"/> Preventive maintenance program for equipment (wheels and bearings, etc.) <input type="checkbox"/> Training in body mechanics <input type="checkbox"/> Procedure (attach to this code of practice) <input type="checkbox"/> Other <hr/> <hr/>	<input type="checkbox"/> Delay the task until controls are in place <input type="checkbox"/> Delay the load into smaller parts to manually lift and carry in accordance with the weight restriction of this code of practice. <input type="checkbox"/> Other <hr/> <hr/>

<sup>1</sup> To lower the risk for people at work, particularly those with less physical capability, the recommended limit for mass should not exceed 15 kg. This will increase the level of health protection afforded to the working population by up to 95%. (ISO 11228-1)





<sup>2</sup> As an approximate guide, the capability of a two-person team is 2/3 the sum of their individual capabilities and, for a three-person team, the capability is half the sum of their individual capabilities. (ISO 11228-1)

▼ Step 2

- Risk Identification

▼ Step 3

- Implementation of Controls

<b>Risk Factors</b> <i>(Check all that apply)</i>	<b>Engineering Controls</b> <i>(The first controls to be implemented)</i> <b>(Check all that apply)</b>	<b>Administrative Controls</b> <b>(Check all that apply)</b>	<b>Emergency procedures</b> <b>(When Engineering and Administrative Controls fail or cannot be used)</b>
<input type="checkbox"/> <b>&gt;10,000 kg lifted per 8 hour period</b> 	<input type="checkbox"/> Mechanical assistance (details): <hr/> <input type="checkbox"/> Decrease the load/weight <input type="checkbox"/> Other <hr/>	<input type="checkbox"/> Job rotation <input type="checkbox"/> Training in body mechanics <input type="checkbox"/> Procedure (attach to this code of practice) <input type="checkbox"/> Other <hr/>	<input type="checkbox"/> Delay the task until controls are in place <input type="checkbox"/> Implement a work/rest regime <input type="checkbox"/> Other <hr/>
<input type="checkbox"/> <b>Working below mid-thigh</b> 	<input type="checkbox"/> Mechanical assistance (details): <hr/> <input type="checkbox"/> Raise the start/end position of the load <input type="checkbox"/> Other <hr/>	<input type="checkbox"/> Job rotation <input type="checkbox"/> Training in body mechanics <input type="checkbox"/> Procedure (attach to this code of practice) <input type="checkbox"/> Other <hr/>	<input type="checkbox"/> Delay the task until controls are in place <input type="checkbox"/> Implement a work/rest regime <input type="checkbox"/> Other <hr/>
<input type="checkbox"/> <b>Twisting</b> 	<input type="checkbox"/> Mechanical assistance (details): <hr/> <input type="checkbox"/> Relocate the load to encourage foot movement <input type="checkbox"/> Other <hr/>	<input type="checkbox"/> Job rotation <input type="checkbox"/> Training in body mechanics <input type="checkbox"/> Procedure (attach to this code of practice) <input type="checkbox"/> Other <hr/>	<input type="checkbox"/> Delay the task until controls are in place <input type="checkbox"/> Implement a work/rest regime <input type="checkbox"/> Other <hr/>
<input type="checkbox"/> <b>Working above shoulder height</b> 	<input type="checkbox"/> Mechanical assistance (details): <hr/> <input type="checkbox"/> Lower the start/end position of the load <input type="checkbox"/> Other <hr/>	<input type="checkbox"/> Training in body mechanics <input type="checkbox"/> Procedure (attach to this code of practice) <input type="checkbox"/> Other <hr/>	<input type="checkbox"/> Delay the task until controls are in place <input type="checkbox"/> Implement a work/rest regime <input type="checkbox"/> Other <hr/>

▼ Step 4 - Evaluation

**Complete this evaluation (at least annually) for EVERY task**

Administrator/evaluator:		Date of assessment:									
Person(s) at risk:											
Task name/description:											
	<input checked="" type="checkbox"/>		Initial	Current	Objective	Objective met (Yes/No)					
Injury analysis	<input type="checkbox"/>	Incident frequency									
		Lost time									
		All incidents									
		Number of incidents									
		Comments:									
Initial employee or supervisor concerns as reported through the incident reporting process	<input type="checkbox"/>	List of concerns:									
Current employee or supervisor concerns as reported through the incident reporting process	<input type="checkbox"/>	List of concerns:									
<i>Body Discomfort Survey</i> has been administered	<input type="checkbox"/>	Comments:									

*Note: Any Discomfort Survey result over "5" should be considered a high risk for injury.*

Body Part		Neck	Left Shoulder	Right Shoulder	Left Elbow	Right Elbow	Left Wrist /Hand	Right Wrist /Hand	Back	Left Knee	Right Knee
Average Discomfort Survey Score	Initial										
	Current										
	Objective										

**Summary of results:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



▼ **Step 5 - Conclusion**

If the results are satisfactory:

- Monitor the task.
- At minimum, re-administer *Body Discomfort Survey* annually.
- Other

If the results are not satisfactory, these steps should be followed:

				Comments
<b>1</b>	Have control strategies been implemented?	<input type="checkbox"/> Yes	Proceed to No. 2	
		<input type="checkbox"/> No	Implement control strategies	
<b>2</b>	Are control strategies operating effectively?	<input type="checkbox"/> Yes	Proceed to No. 4	
		<input type="checkbox"/> No	Proceed to No. 3	
<b>3</b>	Can control strategies or measures be modified?	<input type="checkbox"/> Yes	Modify control measures if necessary	
		<input type="checkbox"/> No	Proceed to No. 4	
<b>4</b>	Identify new strategies available to be applied and implemented	<input type="checkbox"/>	Details:	
<b>5</b>	Re-evaluate new strategies	<input type="checkbox"/>	Go to Evaluation	

## Appendix C

### Sample Manual Handling Engineering Controls



**Drum Lifter/Transporter**  
*Used to reduce the risk associated with moving drums.*



**Flatbed Hand Truck**  
*Used to reduce carrying distance and frequency.*



**Forklift**  
*Used for items too heavy to handle manually.*



**Hand Truck/Dolly**  
*Reduces carrying distance.*



**Manual Pallet Stacker**  
*Raises and lowers materials to the appropriate height.*



**PalletPal™**  
*Used to adjust the start/end height of the load, to rotate the load, and to minimize reaching and bending.*



**Scissor Cart**  
*Used to adjust the height of the load to minimize bending.*



**Track-O Lift™**  
*Used to transport loads up stairs.*



**Vacuum Lifter**  
*Handles sacks and bags that are hard to grip by hand. They can also be very useful for handling large and heavy items.*

*More examples of manual handling controls can be found online.*

*\*It should be noted that WorkSafeNB does not promote any one product or distributor and these are only examples of tools that can be purchased and used. Each facility must research products to determine which one will best suit their needs.*

## Appendix D

### WorkSafeNB Body Discomfort Survey

Name:	Date:
Job Title:	Male <input type="checkbox"/> Female <input type="checkbox"/>

Job Description:

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- 1) How many years have you been working in this particular job or set of tasks? \_\_\_\_\_ years \_\_\_\_\_ months
- 2) For the last six months, please indicate **all** the body part(s) where discomfort occurred.

Body Part	Rate your physical discomfort using the scale below: 0=no discomfort                      10=worst imaginable discomfort	Task that usually causes discomfort
Neck	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Left shoulder	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Right shoulder	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Left elbow	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Right elbow	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Left wrist/hand	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Right wrist/hand	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Back	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Left knee	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	
Right knee	0 -- 1 -- 2 -- 3 -- 4 -- 5 -- 6 -- 7 -- 8 -- 9 -- 10	

- 3) Which body part rated above represents the one in which you feel the most discomfort?

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DEVELOPING A CODE OF PRACTICE FOR MANUAL HANDLING

4) Have you sought or received medical assistance or treatment for this specific body part? Yes No  
Please specify:

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5) Have there been any changes made to your job or workstation or activities that you must perform to do your work? Yes No

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6) What do you think could improve your job?

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## Appendix E

### Hazard Reporting by Employee

#### What should I do if I notice a hazard?

You should report it immediately to your supervisor. In fact, health and safety legislation requires employees to report hazards to their supervisor.

The immediate hazard reporting process allows employees to report hazardous conditions or practices as they notice them. This procedure allows for prompt reporting and subsequent corrective action without waiting for the next round of regular inspections.

The following is an example of such a form:

#### Hazard Report Form - Example

Name:	Date:
Location:	
Equipment:	
Description of the hazard:	
Suggested corrective action:	
Signature:	
Supervisor's remarks:	
Corrective action taken:	
Signature of Supervisor:	Date:

## Appendix F

## References and Other Sources of Information

1. Association of Canadian Ergonomists  
Suite 1003, 105-150 Crowfoot Crescent NW  
Calgary, AB T3G 3T2  
Toll-free: 1 888 432-2223  
Fax: 403 451-1503  
Email: [info@ace-ergocanada.ca](mailto:info@ace-ergocanada.ca)
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Order online at [www.iso.org](http://www.iso.org).
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*Special thanks to the following organizations for granting permission to use their graphic images:*

Movex Innovation, [www.track-o.com](http://www.track-o.com)

Southworth Products Corporation, [www.southworthproducts.com](http://www.southworthproducts.com)

## Appendix G

### WorkSafeNB Regional Contact Information

#### NORTHWEST

Phone: 506 475-2550  
Fax: 506 475-2568

#### NORTHEAST

Phone: 506 547-7300  
Fax: 506 547-7311

#### SOUTHWEST

Phone: 506 738-8411  
Fax: 506 738-4467

#### SOUTHEAST

Phone: 506 867-0525  
Fax: 506 859-6911



[www.worksafenb.ca](http://www.worksafenb.ca)

1 800 222-9775

