



## ▶ **ERGONOMICS TRAINING**

**Occupational injuries to muscles, nerves and tendons** may not be life-ending, but they can certainly be life-altering. Across Canada one in every 10 adults suffer from musculoskeletal injuries or disorders (MSDs). Most begin in the workplace. Fortunately, most workplace hazards that give rise to MSDs can be identified and eliminated. With this in mind, the Workers Health & Safety Centre (WHSC) has teamed with workplace representatives and others with specific ergonomic knowledge and experience to develop a range of training programs designed to prepare workers and workplace representatives in their pursuit of MSD prevention.

### **Ergonomic Toolbox\***

▶ Duration 3.00 hours

This program is designed to introduce participants to the three components of the Musculoskeletal Disorders (MSD) Prevention Toolbox – the final resource published by the Occupational Health and Safety Council of Ontario (OHSCO) in support of their Musculoskeletal Disorder Prevention Guideline for Ontario. Participants of this ‘toolbox’ course will gain, among other things, some basic insight into more complex hazard identification and assessment tools, including Snook Tables and the NIOSH Lifting Equation.

### **Ergonomics: Applying Prevention Principles at Work**

▶ Duration 6.00 hours

This program builds on the knowledge obtained from *Ergonomics: Basic Principles* training program. The information presented helps prepare participants to play a more hands-on role in the prevention of MSDs. The program begins with an introduction to ergonomics and a detailed review of relevant legislation, its shortfalls and the characteristics of work and the workplace responsible for the development of these disorders. Participants then take a more detailed look at the science of designing work for workers. They will look at specific ergonomic assessment tools including Anthropometric and Snook tables.

### **Ergonomics: Basic Information for Joint Committees**

▶ Duration 9.00 hours

This program helps prepare members of joint committees and other workplace parties to play a more active role promoting the prevention of musculoskeletal injuries or disorders (MSDs) in their workplace. Examples of MSDs and their symptoms are discussed along with the risk factors responsible for the development of these injuries. Participants will then explore the basic concepts and sciences behind ergonomics with a focus on designing work and work processes to meet the physical and mental needs of workers. Strategies to implement workplace change, with a focus on the role of joint committees and the need for communication with workers are also discussed.



## **Ergonomics: Basic Principles**

▶ Duration 6.00 hours

This program explores the basics of how work can damage the musculoskeletal system. Equally important, participants learn about ergonomic solutions designed to eliminate or reduce work factors responsible for development of pain and musculoskeletal disorders (MSDs). Ergonomics is an applied science concerned with designing work stations, equipment, tools and processes so workers can interact with the work environment without harm. The program is designed to empower participants to play an informed and active role identifying the work factors that cause MSDs and recommending ergonomic solutions to eliminate the risk to worker health.

## **Ergonomics and MSDs**

▶ Duration 3.00 hours

Poorly designed work and work environments can contribute to painful and life-altering musculoskeletal disorders (MSDs). These account for more than 40 per cent of all approved lost-time injury claims in Ontario. This program provides joint health and safety committees with the knowledge and skills to recognize, assess and control, if not eliminate, factors that contribute to MSDs. Participants will review types of MSDs, their symptoms and health effects, explore how job demands and workplace components can contribute to MSDs, and learn how to identify and assess tasks that increase the risk of injury. Participants will also learn how ergonomics can be used to reduce job demands allowing workers to complete tasks more comfortably and safely.

## **Ergonomics in Health Care and Social Services**

▶ Duration 3.00 hours

This program was developed to provide health care and social service workers with the skills to recognize, assess and eliminate or control musculoskeletal disorders (MSD) risk factors. This module examines MSDs, common types and health effects. Participants will explore the two categories of risk factors that lead to MSDs – job demands and workplace components. With an understanding of what causes MSDs, participants will examine the science behind ergonomics and the importance of making the work fit the worker. Participants will learn how to identify and assess tasks that may cause workers to adopt awkward postures, require forceful exertions or are repetitive in nature. The program includes several valuable resource sheets, many of which are specific to health care workers.

## **Hand Tools**

▶ Duration 3.00 hours

This program links the hazards and risk factors associated with the design and use of hand tools with specific injuries such as those affecting the musculoskeletal system. Relevant legislation, codes and standards are outlined along with practical tools for recognizing and assessing hazards and risk factors. The program is designed to prepare participants to return to their workplaces armed with the knowledge and tools to develop and implement an action plan to control or eliminate the health risks associated with hand tools.

## **Manual Material Handling**

▶ Duration 3.00 hours

This program looks at potential hazards faced by workers performing lifting, carrying and other manual material handling (MMH) tasks and the specific injuries they may suffer. Relevant legislation is reviewed including guidelines established by the U.S. National Institute for Occupational Safety and Health (NIOSH). Specific hazard recognition and assessment tools are discussed along with practical measures for eliminating or controlling hazards associated with MMH tasks including effective workplace design and the use of mechanical devices.

## Office Work Environment

▶ Duration 3.00 hours

This program will equip learners to recommend control measures designed to eliminate or reduce hazards in office work settings. Participants will learn about proper workstation set up and ways of preventing musculoskeletal disorders, the overall work environment, relevant legislation, standards and guidelines, and how to develop an action plan for the office workplace. Through discussion participants will learn how posture, force and repetition can influence the risk of injury and how reducing the hazards of sitting, applying good job design principles and utilizing work organization systems and policies can help prevent injuries. Additional office hazards such as lighting, noise, temperature, indoor air quality, stress and safety hazards will be discussed along with control measures. Participants will also explore ways joint health and safety committee members can assess hazards and develop an effective plan to address office hazards.

## Patient Handling Program

▶ Duration 3.00 hours

This program explores the factors that lead to the development of musculoskeletal disorders (MSDs) in workers who lift, transfer or reposition patients. Participants will discuss the elements of a workplace prevention program including the development of a workplace patient lifting policy and program to implement it. This includes a review of tools, equipment and work procedures designed specifically to help prevent MSDs and aid in patient safety. Part of this discussion will focus on legally mandated involvement of the joint health and safety committee and workers in the development of the program. Included with this training are resources such as a sample patient handling policy and generic patient lifting assessment forms that can be customized to the workplace.

## Work Organization

▶ Duration 3.00 hours

This program explores how hours of work, scheduling, technological change, pace of work and other elements of work organization affect the health and well-being of workers. Relevant legislation is reviewed along with hazard recognition and assessment tools. Flextime, job enrichment and job rotation are just a few of the measures explored that can be used to overcome the hazards associated with poor work organization and lessen the physical and mental health injuries faced by workers.

\* Participant materials are available in French for programs marked with an asterisk. Upon request, any of our training programs are available for delivery by a French-speaking, WHSC-qualified instructor.

