







WHSC Ergonomics Training

Workers Health & Safety Centre

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.

Ergonomics: Injuries, Risk Factors and Design Principles**

Program Duration: 6 hours

This one-day program will help participants better understand how work can damage the muscles, tendons and other parts of the musculoskeletal system. Participants will identify and discuss the many workplace risk factors responsible for the development of MSDs including repetition, awkward or fixed postures, forceful movements, vibration and inadequate rest. Discussion will then move to workplace solutions and strategies needed to end the MSD epidemic, including the principle of designing work to fit workers and the field of study known as ergonomics. It's worth noting, this new program also reflects important information on MSDs developed by the Occupational Health and Safety Council of Ontario (OHSCO) and endorsed by Ontario's Ministry of Labour.

Ergonomic Toolbox

Program Duration: 3 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. This guideline is intended as a framework for MSD prevention and is being promoted as such by Ontario's Ministry of Labour. 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

Program Duration: 6 hours

This program builds on the knowledge obtained from *Ergonomics: Injuries, Risk Factors and Design 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. Specific workplace examples are used throughout the discussion to aid in the learning process.

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WHSC Ergonomics Training *cont'd*

Office Layout and Design

Program Duration: 3 hours

This program explores the risk to health, including damage to the musculoskeletal system caused by poorly designed workstations and work organization. This includes the work surface, chair and the use of computers. Participants will also discuss other potentially hazardous elements in an office environment including lighting, ventilation and noise. They will focus on control measures designed to eliminate or control these hazards and the resulting musculoskeletal disorders (MSDs) and other health impacts.

Manual Material Handling*

Program Duration: 3 hours

This program looks at potential hazard 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.

Hand Tools*

Program Duration: 3 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.

Work Design

Program Duration: 3 hours

This program (applicable to all sectors) looks at some of the factors responsible for the development of MSDs including poorly designed workstations, tools and equipment, the work environment and work organization. Relevant legislation is reviewed along with hazard recognition and assessment tools. But discussion focuses on the use of ergonomic principles when designing or modifying work and the workplace.

Ergonomics in Health Care and Social Services

Program Duration: 3 hours

This program highlights the hazardous conditions faced by workers in health care and social services that lead to the development of MSDs. Like other WHSC ergonomics programs, participants will also explore the tools and skills needed to recognize, assess and eliminate or control the working conditions responsible for this ongoing MSD epidemic. This includes an orientation to MSD prevention tools developed by the Occupational Health and Safety Council of Ontario (OSHCO). Also included are valuable resources such as identification and assessment forms and workplace ergonomic checklists

Patient Handling

Program Duration: 3 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 patient lifting policy and a workplace program to implement the policy. 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 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.

* *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.*

** *A similar training program is available in French.*