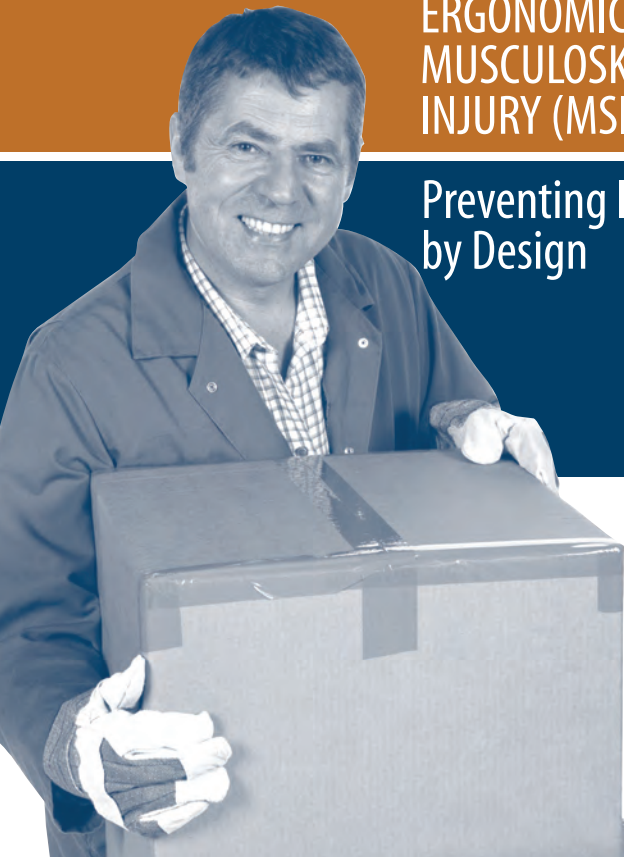


WORKSAFE
TRAVAIL SÉCURITAIRE



ERGONOMICS AND MUSCULOSKELETAL INJURY (MSI)

Preventing Injuries
by Design



Some of the tasks we perform at work, such as lifting, reaching and repeating the same movements, can strain our bodies. In some situations, these tasks can result in an injury to the muscles, tendons, ligaments, nerves, blood vessels, and joints of the neck, shoulders, arms, wrists, legs and back. This type of injury is called a musculoskeletal injury (MSI). MSIs account for almost 36% of all lost-time injuries received every year at WorkSafeNB. Back and shoulder injuries are the most common, representing 70% of all MSIs.

“Ergonomics is the science of studying people at work and then designing tasks, jobs, information, tools, equipment, facilities and the working environment so people can be safe and healthy, effective, productive and comfortable.”

(Ergonomic Design Guidelines, Auburn Engineers, Inc., 1998)

Ergonomics tries to match the job to the worker instead of forcing the worker to adapt to the job, and is key to reducing or eliminating MSIs.

The likelihood of developing an MSI depends on the magnitude (how much), frequency (how often) and duration (how long) of exposure to associated risk factors.

RISK FACTORS

- Forceful exertion (lifting, carrying, pushing or pulling)
- Repetition
- Awkward or static postures

Exposure to these risk factors may result in the development of MSIs. Signs and symptoms of MSIs may appear suddenly – for example, from a single incident that causes an injury – or they may appear gradually over a longer period of time.

Everyone has a role to play in maintaining a healthy and safe workplace. That's the internal responsibility system, and it's the basis of New Brunswick's *Occupational Health and Safety (OHS) Act*. Employers, supervisors, workers and Joint Health and Safety Committees (JHSCs) or health and safety representatives must work together to prevent workplace injuries and illnesses. Here are some ways you can help reduce the risk of musculoskeletal injuries in your workplace:

Workers

- Know and report MSI symptoms and hazards to your supervisor.
- Take scheduled breaks and change postures and positions or relax muscles regularly.
- Bring questions and concerns to your supervisor, or ask for additional training.
- Offer suggestions to improve working conditions to your supervisor, JHSC or health and safety representative.
- Ensure you understand the information and instructions provided.
- Use proper working techniques.
- Use the equipment and tools provided in your workplace to reduce exposure to MSI hazards.
- Know how to make adjustments to your workstation to suit your body and the work you do, and ask for help as needed.

Supervisors

- Ensure everyone under your supervision is aware of MSI hazards on the job and is trained to do the job safely.
- Look for MSI hazards during workplace inspections, job task analyses and discussions with workers.
- When reviewing injury reports, reinforce proper working techniques and use of personal protective equipment (PPE).

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- Encourage and support workers taking scheduled breaks.
 - Ensure workers adjust their workstations to suit themselves and their work, and provide help as needed.
 - Support workers when they have questions or concerns.
 - Be aware of MSI warning signs and indicators.
 - Take action on reported MSI hazards and concerns, and follow up with workers.

JHSC members and health & safety representatives

- Get training to recognize, assess and control MSI hazards.
- Include MSI hazards on inspection checklists.
- Actively look for MSI hazards.
- Discuss MSI-related concerns at JHSC meetings, and with the employer and workers.
- Ensure everyone in the workplace has received training on how to do their jobs safely and how to identify MSI hazards.
- Make recommendations to the employer on how to eliminate, control or reduce exposure to MSI hazards.

Employers and managers

- Incorporate MSI prevention into the health and safety policy and program.
- Train workers and JHSC members or the health and safety representative on how to recognize, assess and eliminate or control MSI hazards.



- Ensure supervisors know what to do if they recognize MSI hazards, or if a worker raises a concern.
- Identify MSI hazards related to poor design of tools, equipment, workstations or work practices, and control any associated risks.
- Make sure new equipment is designed and installed to reduce exposure to MSI hazards.
- Give workers the equipment and training they need to reduce their exposure to MSI hazards.

WHAT'S THE ANSWER?

WorkSafeNB ergonomics consultants may be available to help workplaces identify risk factors. This is done by working with employees and employers to educate about MSIs, evaluate their root causes, and work as a team to find solutions for a particular job or work area.

Remember, proper use of ergonomics can:

- Prevent injury
- Improve quality and productivity
- Increase morale
- Increase work efficiency and effectiveness

For more information, please contact your WorkSafeNB regional ergonomics consultant.