

The purpose of this newsletter is to unite all the UNBC campus's (Prince George, Prince Rupert, Terrace, Gitwinksihlkw, Quesnel, Likely, Ft St John) and grow our UNBC Community's Safety Culture together by regularly communicating important Safety information. UNBC's mission is to Ignite, Inspire, and Lead change.

## Welcome to the June edition of our Safety Newsletter!

### This month our focus is on Ergonomics for injury Prevention & Accommodation.

Understanding Ergonomics: Ergonomics, also known as human factors, is the scientific discipline focused on designing and arranging environments, products, and systems to fit the people who use them. The primary goal is to create more comfortable, efficient, and safe environments by considering human physical and psychological needs and limitations. By reducing physical strain and preventing injuries, ergonomics aims to enhance safety, comfort, and performance in various settings, including workplaces. Ergonomics is essential in various fields, from office work and manufacturing to healthcare, ensuring that environments are tailored to human capabilities and promoting overall well-being. Here are some key aspects of ergonomics:

- **Understanding Human Needs and Limitations:** Ergonomics considers body size, strength, cognitive abilities, sensory perception, and psychological factors.
- **Workplace Design:** It involves arranging elements like desks, chairs, monitors, keyboards, and lighting to suit the user's needs, enhancing productivity while minimizing discomfort and injury risks.
- **Physical Well-being:** Emphasizing proper posture, adjustable furniture, and encouraging movement to combat physical issues such as repetitive injuries, back pain, and eye strain.
- **Interdisciplinary Approach:** Incorporates data and techniques from various scientific areas, including biomechanics, environmental physics, applied psychology, and social psychology.

Ergonomics plays a crucial role in injury prevention and accommodation, particularly in British Columbia, where musculoskeletal injuries (MSIs) are the most common work-related injuries. These injuries or disorders of muscles, tendons, ligaments, joints, nerves, blood vessels, or related soft tissues. Common MSIs are sprains and inflammations, often caused or aggravated by work.

**Risk factors for MSIs:** Several physical risk factors contribute to MSIs

- **Force** – Exerting force on an object during a task.
- **Repetition** – Performing repetitive tasks with little chance for rest.
- **Work Posture** – Maintaining awkward or static postures for extended periods.
- **Local Contact Stress** – Hard or sharp objects pressing against the skin.

WorkSafeBC offers various resources, including detailed guidelines, worksheets and training programs to help employers and workers understand and implement ergonomic practices effectively to prevent musculoskeletal injuries (MSIs). These guidelines include:

- **Risk Assessment Tools:** Employers must use tools like the MSI Risk Assessment Worksheet and lift/lower calculators to evaluate tasks and identify ergonomic hazards.
- **Risk Controls:** Implementing ergonomic solutions such as adjustable workstations, proper lifting techniques, and regular breaks to reduce strain.

#### Fun Fact!

UNBC Security guards get their steps! At the main campus they walk an average of 10-20 km per shift.

*Roles & Responsibilities*

*Occupational Health & Safety Fundamentals*

*Policies & Procedures*

*Legitimation: Acts & Regulations*

*Hazard Identification, Risk Assessment & Control*

*Ergonomics for injury prevention & accommodation*

*Hazardous Materials & Occupational Hygiene*

*Fire Safety Planning, Systems & Inspections*

*Accident Investigation & Reporting*

*Worksite Inspections*

*Emergency Preparedness & Response*

*Joint Occupational Health and Safety Committee*

If your UNBC workspace needs an ergonomic assessment. To book an appointment here: [Ergonomic Assessment Request | UNBC](#)

- **Educational Resources** offered by UNBC - OH&S Course - Ergonomics for Injury Prevention & Accommodation. This course helps to spot ergonomic hazards and understand procedures that fit into occupational health and safety management systems.
- **Continuing studies** offers a workplace Ergonomic assessment course - [Workplace Ergonomics Assessment | UNBC](#)

# Ergonomic Risk Controls

Employers must implement ergonomic risk controls, which may include:

- **Appropriate workstations/keyboards trays:** To accommodate different body sizes and reduce strain.
- **Proper Lifting Techniques:** Training workers in safe lifting practices to prevent back injuries.
- **Regular Breaks:** Encouraging breaks to reduce the risk of repetitive strain injuries.

Ergonomics applies to every industry, in different ways. Health care and industrial applications involve protection against heavy lifting, while administrative industries focus on office ergonomics to prevent musculoskeletal strain from prolonged sitting and repetitive tasks. Here are examples of ergonomic considerations that apply to workplaces, including UNBC.

## Materials Handling

- **Lifting and Carrying:** Use mechanical aids like carts or trolleys to transport heavy materials. Ensure loads are light enough to lift safely and plan routes before moving items.
- Store heavy items at mid-body height to make retrieval easier and avoid lifting objects that are slippery, extremely hot, or unevenly balanced.

## Workstation Design

- **Adjustable Workstations:** Adjustable office chairs and appropriate furniture to the needs of the individual. This helps reduce strain and improve comfort.
- **Tool Selection:** Use tools with ergonomic handles that align with the centre of your gripping hand. Tools with angled handles or pistol grips are beneficial for tasks requiring horizontal force.

## Breaks and Recovery

- **Regular Breaks and task rotation:** Encourage frequent, short breaks, and conduct a variety of different types of work to reduce the risk of repetitive strain injuries. Stretch muscles to warm up before starting tasks and take breaks to recover.

## Posture and Movement

- **Neutral Posture:** Maintain a neutral posture to reduce strain on muscles and joints. Avoid awkward positions and use mechanical devices to help reduce reaching.
- **Movement Techniques:** Use small steps when walking with heavy loads and avoid fast or jerky movements. Keep your arms and the load close to your body.

## Environmental Conditions

- **Extreme Weather:** Wear appropriate clothing to stay dry and warm in cold conditions and use sunscreen and hydration strategies in hot conditions.
- **Visibility and Safety:** Ensure high visibility of other workers and use caution when maneuvering in the plant. Regularly inspect equipment and work areas for hazards.

## Monitoring and Adjustments

- **Continuous Monitoring:** Regularly self-assess ergonomic risks and make necessary adjustments to workstations and practices. Provide feedback to leadership to improve ergonomic solutions. By integrating these ergonomic principles into daily operation, you can enhance worker safety, reduce the risk of injuries, and improve overall productivity.

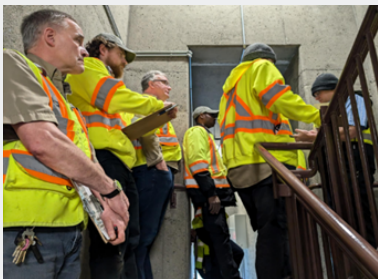
## Training and Education

- **Ergonomic Training:** Provide training on proper lifting techniques, workstation adjustments, and the use of ergonomic tools. Educate workers on the importance of maintaining neutral postures and taking regular breaks.

# Positive Observations

*Promoting a Safety Conscious Culture for our UNBC Community*

The fire drill team in high vis PPE ready & waiting for instructions.



Traffic Control person holding the slow sign, and delineators clearly displayed for the road hazards.



If you see any positive safety initiatives, please photograph them, and send the pictures to [safety@unbc.ca](mailto:safety@unbc.ca)

App Store



Google Play



## Working together for safety

*We would like to thank everyone for participating in our growing Safety Community at UNBC!*