

Safety Facts: Ergonomics*

What is “it”?

We define ergonomics as the science of fitting a workplace to a user’s needs. It is the relationship between people and the work process. Is your workstation built to provide a good work posture? Does your job involve a lot of force, repetition, or local contact stress?

Ergonomics is also known as human factors. It is the scientific discipline concerned with understanding interactions among humans and other elements of systems. Ergonomists apply theory, principles, data, and methods to design to optimize human well-being and overall system performance.

Why is it important?

Ergonomics works to reduce the risk of musculoskeletal injuries (MSI), including damage to muscles, bones or joints through designed workplaces, equipment, systems, and work. On average, MSI claims are 34% of all WorkSafeBC claims. From 2011 to 2020, that was an average of 17,891 claims per year. MSI is the leading cause of injury in the food and beverage subsector.



Key characteristics of ergonomics

There are three broad domains of ergonomics: Physical, cognitive, and organizational. Ergonomists work in all three areas as part of a holistic approach to prevent injuries.

Physical ergonomics is concerned with human anatomy as it relates to physical activity.

Cognitive ergonomics is concerned with mental processes, such as perception, memory, reasoning, and motor response, as they affect interactions among humans and other system elements.

Organizational ergonomics is concerned with optimizing socio-technical systems, including their organizational structures, policies, and processes.



Preventive next steps

Participatory ergonomics collaborates with workers and other stakeholders to solve ergonomics-related problems.

The five steps to MSI prevention are:

1. Identify the problem and review the current situation
2. Identify the resources available and create an ergonomics team
3. Conduct ergonomics assessment with system approach
4. Review recommendations with your safety committee and management and make necessary changes
5. Evaluation of the MSI prevention program regularly



For additional resources visit:

[WorkSafeBC](#) | Ergonomics (MSI) Requirements

[MSI Prevention Guidebook](#) | Manufacturing Safety Alliance of BC (safetyalliancebc.ca)

[Online Course](#) | Online Learning Centre (myabsorb.ca)

Ergonomics Toolbox Talk

Name of Facilitator: _____ Date: _____

Supervisor Signature: _____ Date: _____

Employee feedback/questions/recommendations

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Workers who attended

Name	Initial	Name	Initial
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
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Key Talking Points (Facilitator Notes)
