

# Musculoskeletal Injury (MSI) Prevention\*



A musculoskeletal injury (MSI) is an injury or disorder of the muscles, tendons, ligaments, joints, nerves, blood vessels or related soft tissue, including a sprain, strain, and inflammation, which may be caused or aggravated by work. Well-known MSIs include sprains and strains, carpal tunnel syndrome, bursitis, trigger finger, white finger diseases, and epicondylitis (tennis elbow).

## Why is it important?

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 MSI injuries

An MSI injury may be an acute injury – for example, you lift something and feel immediate pain. An MSI injury could also be a chronic injury, such as an injury that takes time to develop (carpal tunnel syndrome).

With an MSI injury, there may be signs and symptoms. You can observe signs like swelling, redness, or difficulty moving a body part. Symptoms are what can be felt but not observed. Symptoms could include numbness, tingling, or pain.

It is important to recognize signs and symptoms and seek early intervention to prevent them from becoming disabling injuries.

## Associated risks/hazards

The physical risk factors for MSI are the physical demands of a task and could include:

- Force (lifting, lowering, carrying, pushing, pulling, and grip)
- Repetition
- Work posture
- Local contact stress

The duration and magnitude of your exposure can contribute to an MSI injury.



## Preventive next steps

- Educate workers about the risk factors, signs and symptoms of injury, and potential health effects.
- Identify jobs that put workers at risk for developing an MSI
- Complete risk assessments for jobs that place workers at risk for developing MSI
- Implement control measures to limit worker risk of developing MSIs
- Train workers in the risk control measures



## For additional resources visit:

[Occupational Health and Safety Regulations](#) | WorkSafeBC

[Understanding the Risks of Musculoskeletal Injury \(MSI\)](#) | WorkSafeBC

[Preventing Musculoskeletal Injury \(MSI\): A Guide for Employers and Joint Committees](#) | WorkSafeBC

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

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

