

Ergonomics



What is Ergonomics?

Ergonomics is the study of designing workspaces and tasks to suit the people who use them. Rather than expecting workers to adapt to uncomfortable or inefficient setups, ergonomics focuses on shaping the environment to support comfort, safety, and productivity. Whether it's adjusting a chair, positioning a monitor, ergonomic design helps reduce strain, prevent injuries, and improve overall well-being at work.



Safe Sitting Posture

Your spine is strongest in its natural S-curve, called the neutral position. Disrupting this alignment, by hunching, twisting, or bending incorrectly can increase the risk of injury.

- Sitting Posture: Ears over shoulders, shoulders over hips.
- Avoid Slouching: Keep your back supported and feet flat on the floor.
- Monitor positioning: Ensure monitor screens are eye level to avoid neck strain.
- Back Support: Utilize the chair backrest to reduce pressure on the spine.
- Arm Position: Keep forearms parallel to the floor, elbows bent at 90°, and shoulders relaxed.
- Leg Alignment: Thighs should be parallel to the floor, forming a 90° angle with your torso.





Repetitive Strain Injuries

Repetitive Strain Injuries (RSIs) are common workplace injuries that affect soft tissues such as muscles, tendons, ligaments, joints, and nerves. These injuries are often caused by repeated movements without giving the body enough time to rest and recover. To help prevent RSIs, it's important to take regular breaks and vary your tasks throughout the day.

Safe Standing Posture

Maintaining a neutral spine during standing tasks helps reduce strain and prevent injury. Promote ergonomic posture while standing by.

- Standing Tall: Keep ears aligned over shoulders, and shoulders over hips.
- Distribute Weight Evenly: Avoid leaning on one leg or locking your knees.
- Wear supportive footwear: Choose comfortable footwear that provides proper support.
- Use an Antifatigue Mat: Standing on an anti-fatigue mat to reduce strain on your legs and reduce lower back pressure.
- Adjust Work Surface Height: Keep elbows at a 90° angle and wrists straight.

Stretching

It's important to take frequent micro-breaks throughout the day to stretch and move. Regular movement helps reduce muscle fatigue and improves circulation, keeping your body energized and comfortable. Stretching also supports good posture and helps prevent discomfort caused by prolonged sitting or standing.

Ideal Work Setup

Before making workstation adjustments ask yourself the following questions.

- 1. Do I have all the necessary equipment to complete the task at hand?
- 2. Is the equipment set up correctly to complete this task?
- 3. Can the equipment be adjusted to suit my posture and needs?
- 4. Is the equipment in good condition?

An ideal workstation setup should have the following capabilities: monitor adjustability, external keyboard and mouse, adjustable office chair, laptop riser and frequently used items within close proximity. Utilize the <u>CCOHS "Sitting at Work"</u> infographic for further insight on proper ergonomic posture and workstation set up.

Adapted from: CCOHS & WCB Updated: September 2025

EARS in line with shoulders

SHOULDERS back and relaxed, not rounded or elevated

BACK straight and supported, sitting upright or leaning

THIGHS and HIPS

supported by a well-padded seat, parallel to the floor

> FEET forward. by the footrest

> > 65%+

HEAD level in line with the torso

FOREARMS, WRISTS and HANDS relaxed and straight

ELBOWS close to the body, bent between 90° and 120°

Sitting at WORK

While it may look harmless, sitting is a serious workplace health and safety issue

to get you out of your seat

- Try to decrease the amount of time you are sedentary by two to three hours over a 12-hour day.
- Find opportunities to incorporate daily physical activity.
- Use an alarm, app or smart watch to remind yourself to move around for one to three minutes every half hour.
- Stand up when using the phone if possible.
- Stand up and stretch frequently during the course of your day.

What employers can do:

- Offer a variety of tasks to encourage physical movement.
- Incorporate 5 minute activity breaks for every 40-50 mintues of sitting.
- · Provide education and training on the health hazards of prolonged sitting and how to improve working positions.
- Consider providing sit/stand workstations.
- Try walking or standing meetings.



fully supported



- Muscles are more likely to pull, cramp or strain
- Fatigue and tension in the back and neck muscles
- Steady compression on the spinal discs
- Decreased fitness
- · Reduced heart and lung efficiency
- Digestive problems

The majority of full-time working adults in Canada are not getting enough physical activity and are spending 65-73% of their day sedentary.

Source: Statistics Canada, 2020