

# Ergonomics – Computer Workstations

**Fact:** Working with the body in a neutral position reduces stress on the muscles, tendons, and skeletal system and reduces your risk of developing a musculoskeletal disorder (MSD).



## Get up and Move!

Regardless of how good your working posture is, working in the same posture or sitting still for prolonged periods isn't healthy. You should change your working position frequently throughout the day by:

- Stretching your fingers, hands, arms, and torso
- Periodically standing up and walking around for a few minutes
- Performing some of your tasks at a stand-up workstation: Computing, reading, phone, meetings

## Key points to remember:

These are important considerations to keep in mind each day when attempting to maintain neutral body postures while working at a computer workstation:

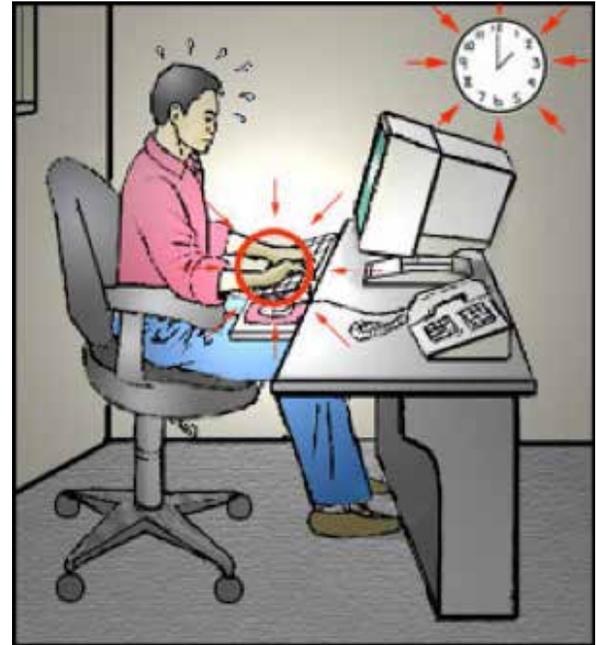
- *Hands, wrists, and forearms* are straight, in-line and roughly parallel to the floor.
- *Head* is level, forward facing, and balanced. Generally, it's in line with the torso. Eyes should be at an even level with computer screen.
- *Shoulders* are relaxed and upper arms hang normally at the side of the body.
- *Elbows* stay in close to the body and are bent between 90 and 120 degrees.
- *Feet* are fully supported by the floor or a footrest may be used if the desk height is not adjustable.
- *Back* is fully supported with appropriate lumbar support when sitting vertical or leaning back slightly.
- *Thighs and hips* are supported and generally parallel to the floor.
- *Knees* are about the same height as the hips with the feet slightly forward.

*continued...*

**Keep in Mind:** Even when the design of the workstation is correct and environmental factors are at their best, users can face risks from repetitive tasks.

When motions are isolated and repeated frequently for prolonged periods, there may be inadequate time for your muscles and tendons to recover. Combining repetitive tasks with factors such as awkward postures and muscular or joint stress may increase the risk of injury.

Additionally, failing to recognize early warning signs could result in the development of serious injuries.



## Musculoskeletal Disorder Signs and Symptoms

To prevent serious injury or permanent damage, it's important to seek assessment from a medical professional for signs and symptoms as early as possible. Users at risk for MSDs associated with computer use may experience some of these signs or symptoms:

- Numbness or a burning sensation in the hand
- Reduced grip strength
- Swelling or stiffness in the joints
- Pain in wrists, forearms, elbows, neck or back
- Reduced range of motion in the shoulder, neck, or back
- Dry, itchy, or sore eyes
- Blurred or double vision
- Aching or tingling
- Cramping
- Weakness
- Headaches

## Workplace Environment Tips

- Arrange your office to reduce glare from overhead lights, desk lamps, and windows to minimize strain on eyes.
- Maintain appropriate air circulation and temperature settings.
- Avoid having desks directly under air conditioning vents or heat blowers that “dump” air directly on top of workers.
- Keep ambient noise to a minimum.
- Support an inclusive and collaborative environment among staff. Every team member should feel valued to avoid stress, staff disengagement, or work place negativity. These can lead to headaches, physical tension, and discomfort.

## Resources and photos:

<https://www.osha.gov/SLTC/etools/computerworkstations/workprocess.html>