

Topic: Ergonomics #2

Reducing Your Risk of an MSD Injury

Have you ever tried to squeeze a jigsaw puzzle piece into a spot that looked right, but just didn't fit, no matter how persistent you were? The same struggle can occur at work. Sometimes your body is being crammed into an awkward position that's just not right. Forcing a puzzle piece into the wrong spot means you won't complete your puzzle. But when you do the same thing with your body, you can end up with damaged muscles, tendons, ligaments, nerves and blood vessels. These injuries are known as musculoskeletal disorders (MSDs) and can affect your ability to perform physical tasks, both at work and at home.

How to Ensure a Better Fit

You can reduce your risk of injury by learning how to improve the fit between you and the physical demands of your job. To do this, you need to identify whether your work tasks include certain contributing factors that are known to increase a person's risk of MSDs, and then modify your equipment, tools, tasks and environment accordingly.

Do any of your work tasks involve these contributing factors?

- **Awkward postures.** These include repeated or prolonged reaching, bending, kneeling, twisting, or holding any fixed position. Sometimes awkward positions are a result of poor lighting or poorly designed workstations, requiring workers to bend or twist in order to see or perform the task.
- **Repetitive motions.** Are you performing the same motion over and over again, using the same muscles, tendons or joints, with little opportunity for rest and recovery or variety in the tasks?
- **Forceful exertions.** How much muscular effort is required to move or handle materials? The effect on the body of forceful exertion depends on the load characteristics, how long continuous force is required, the posture used and how often during the day the forceful exertion is required.
- **Pressure points.** Are your hands, wrists, forearms or knees pressing against hard or sharp surfaces for a prolonged period of time? The nerves, tendons and blood vessels in these areas are close to the skin and underlying bones, making them susceptible to damage.
- **Vibration.** Continuous or high intensity vibrations from tools, such as routers, drills, and chain saws can result in pain, numbness and tingling in the fingers, hands and arms.

When considering whether or not you might be at risk of incurring an ergonomic-related injury, you should bear in mind the duration, force and degree of the contributing factor. There is no precise point that is deemed too excessive because we each have our own unique abilities and strengths. Age, physical condition, strength and gender can also affect a person's ability to perform a task.

Conclusion

If you find that your work tasks involve any of these contributing factors, talk to your supervisor about how you can adapt your workstation and work tasks in order to reduce your risks of injury.

The information presented herein has been compiled from various sources believed to be reliable; however, it cannot be assumed that all acceptable safety measures are contained in this publication or that other additional measures may not be required under particular or exceptional circumstances. While every effort is made to ensure that information and recommendations contained within this publication are the best current opinions on the subject, no guarantee or warranty is made by Health Safety and You as to the absolute correctness or sufficiency of any representation contained in this publication herewith.

TOOLBOX TALKS



Quiz:

1. Poor lighting in a workstation can contribute to awkward postures.
True or False
2. Continuous or high intensity vibration from drills or chain saws can result in pain, numbness and tingling in the arms.
True or False
3. The nerves, tendons and blood vessels in the _____ are close to the skin and underlying bones, making them prone to damage from prolonged pressing against hard or sharp surfaces.
 - a. hands
 - b. wrists
 - c. forearms
 - d. All of the above
4. Performing the same motion over and over may put you at risk of a musculoskeletal disorder.
True or False
5. Your co-worker performs the same tasks you do and therefore your risks of incurring an ergonomic injury are the same.
True or False

Answers:

1 True, 2 True, 3d, 4 True, 5 False