

:: Ergonomics ::

You've probably heard the word ergonomics used many times in the past, but may not know what ergonomics is or what it involves. A working definition of ergonomics could be: "The systematic application of knowledge about the psychological, physical and social attributes of human beings in the design and use of all things which affect a person's working conditions, such as equipment and machinery, the work environment and layout, the job itself, training and the organization of work." Basically, ergonomics is the science of designing the job to fit the worker, rather than physically forcing the worker's body to fit the job.

Ensuring that work stations are ergonomically designed, sitting and standing correctly and handling materials safely are ways to prevent repetitive-motion injuries/occupational illnesses, such as carpal tunnel syndrome, from occurring. Here are some tips to help you prevent repetitive-motion injuries and other related occupational illnesses:

When sitting

- Use a straight-backed chair with support for your lower spinal curve. A small cushion or rolled up towel behind your back can help you maintain the proper alignment.
- Check the height of the seat. Adjust your seat so that your knees are slightly lower than your hips. If the seat cannot be adjusted, use a footrest if necessary.
- Keep your feet flat on the floor and avoid crossing your legs.
- Keep your ankles and elbows bent at right angles.
- Sit close to your desk so that you don't have to bend forward. If you do bend, bend from your hips and keep your neck and back in a straight line.
- Position your work or your chair so that you can look forward rather than down. A document holder should be used or your computer screen moved so that the top of it is at eye level.
- Shift your position often to prevent strain, and take a break or do stretching exercises.
- Avoid sudden, jerky movements.
- Take the time to plan your actions and move carefully and cautiously.
- Avoid twisting your torso while moving. Move your whole body when turning, and keep your feet and hips facing your destination.
- Turn toward objects instead of reaching off to one side or pulling things toward you.
- When picking up objects that have fallen onto the floor, slide to the edge of your chair and place one hand on your knee or your desk to support your back. Also, keep one foot in front of you for additional support.

- Take time to walk around or do some gentle stretching to relieve muscle tension.

Use good posture

- Stand straight, shoulders and head back, stomach pulled in.
- When standing for long periods of time, shift your weight from leg to leg or place one foot on a stool or box.

If you have questions or need additional information on ergonomics, contact your local safety professional or the Bureau of Workers' Compensation, Health & Safety Division at:

717-772-1635

Work at the correct height

- Keep your work surface at the proper height (waist level is usually best).

Lifting

- Stand with feet apart.
- Squat.
- Grasp object.
- Keep object close to your body.
- Straighten knees to lift.

Personal Computer Use

- Your head and neck should be just about upright (not bent down/back).
- Your head, neck and trunk of your body should face forward (not twisted).
- Your forearms, wrists and hands are straight and parallel to the floor (not pointing up/down).
- Your wrists and hands are straight (not bent up/down or sideways toward your little finger).
- Your thighs are about parallel to the floor and lower legs are about perpendicular to the floor.
- Your feet should be flat on the floor or should be supported by a stable footrest.