

Ergonomics in the Workplace

A new outlook on your current position.

It's late in the afternoon. You're sitting at your desk — neck bent forward, eyes straining to see your computer monitor. You rub your forehead and the back of your neck to try to alleviate the aching. You lift your arm from the armrest to reach for the mouse and begin what you hope are the final edits to the document you have been working on for days. No matter how much you want to get up and move around, you can't. That deadline is looming.

If this scenario sounds familiar, consider these facts:

- In recent years, repeated trauma disorder accounted for 62 percent of nonfatal occupational illness cases reported (U.S. Bureau of Labor Statistics). These injuries consist of sprains, strains, headaches, eye-strain, and carpal tunnel syndrome, just to name a few. While most of the injuries may seem minor and inconsequential, they can, in fact, be devastating.
- An employee requiring treatment for carpal tunnel syndrome misses an average of 25 days of work.

What Is Ergonomics?

An employee's ability to do a job well is directly affected by his or her physical comfort at work. Ergonomics programs are designed to ensure that employees use the proper work tools, layout, and design needed for optimal performance.

To create an effective ergonomics program, you need to analyze a variety of factors, including how, how often, and how long your employees interact with materials and equipment.

The Goal of Ergonomics

The goal of ergonomics is to make a workstation fit an individual's work style while at the same time optimizing work function. Ergonomics programs educate workers on the steps they can take to personalize their workstations.

Providing the proper equipment is only the first step. Equipment needs to be accompanied by proper instructions for use. For example, an employer can buy a supportive chair, but if the worker doesn't take the time to adjust it to a correct height, the money is wasted.

Detect and Correct

Pain is your body's way of telling you something is wrong and it should not be ignored. If detected — and corrected — early enough, the majority of cases involving short-term injury do not result in permanent injury. So it's critical that you take any health-related issues seriously and address them immediately. The health of your employees, their morale, and your productivity depend on it.

Signs, Symptoms and Possible Causes

Wrist & Hands

- Pain at the back of the wrist may be caused by:
 - Excessive wrist extension. A keyboard too high and/or too far away can result in wrist overextension.



- Tenderness through the thumb or on the thumb side of the wrist may be the result of:
 - Repetitive spacebar strikes or striking keys with excessive force. The pain may also be the result of gripping a pen or pencil too tightly.
- Numbness and tingling in the little finger, or the little finger side of the hand, can be caused by:
 - Excessive pressure on the elbow as well as pressure on the under side of the arm. This can occur when an individual rests an elbow or little finger on the workstation.
- Wrist discomfort on the side of the little finger may be the consequence of:
 - Over-stretching to reach function, cursor or enter keys.
 - Elbows held too far away from the body when typing.

Forearm, Shoulder and Neck

- You may have neck and shoulder discomfort if:
 - Your computer monitor is too high.
 - Your hard copy is too far from the screen.
 - The computer monitor is off to the side, while your keyboard is centered.
 - Your work surface is too high.
 - Your elbows bump the armrests of your chair.
 - Your keyboard and/or work is too far away.
 - You cradle your phone with your shoulder.
- Forearm pain or discomfort on the palm side of the forearm may be the result of:
 - Wrist or forearm resting on work surface.
 - Work surface is too high or too low.
 - Repetitive mouse operation.

Help Yourself

To Minimize Hand and Wrist Discomfort

- Learn shortcut keys to minimize repetitive mouse movements.
- Don't lean on your elbows while using your mouse or your keyboard.
- Don't type with your wrists in front of the keyboard.
- Occasionally separate and straighten fingers for ten seconds.
- Massage your hands and wrists to relax muscles.

To Minimize Forearm, Shoulder and Neck Discomfort

- Don't lean on your elbows while using your mouse or keyboard.
- Keep your elbows close to your body.
- Set your keyboard height so that your elbows are at the same height as the "ASDF" row of the keyboard.
- Relax your shoulders.
- Use a telephone headset, or at least hold the phone in your hand.
- Hold your hands in line with your arms when you type.
- Use a document holder and place it near the screen.
- Don't place your monitor too far away.
- Make sure your documents and equipment are not too far from reach.
- While in your chair, sit up straight and occasionally roll your shoulders backwards and forwards in a circular motion.
- Stretch by dropping your head slowly to the left and the right and drop your chin to your chest.

Warming Up To The Task

Think warming up and stretching is only important when you are about to exercise? For many jobs, it should be a part of the daily work routine. Stretching and maintaining flexibility is essential to preventing repetitive motion injuries. So before you begin any task, remember to "warm up" your muscles to prepare them for exertion.

Overall health also plays a role in ergonomics-related injuries. The better condition your body is in, the lower the risk of injury — and the faster it can heal if injured. Repetitive motion injuries are no exception. Drinking, smoking and being overweight will only challenge your body during the healing process. In addition, eating correctly and getting enough rest will also speed recovery time.

For more information on ergonomics, check out our library of loss control articles on our Web site at sb.thehartford.com.