

Healthy Living

Patient Information from the American Chiropractic Association

Workplace Ergonomics

Since ancient times, people have known that movement is essential to life. Today, a typical office worker sits hunched over a keyboard for eight hours a day and seldom stands up. When the requirements of a job do not match a worker's physical attributes, injury and loss of productivity are likely.

Workplace injuries, a common cause of time off, cost employers and employees billions of dollars every year. Some of the more common workplace injuries are carpal tunnel syndrome (a nerve entrapment at the wrist seen in computer users), low-back pain, tendonitis, bursitis, and neck pain or headaches.

What causes workplace injuries?

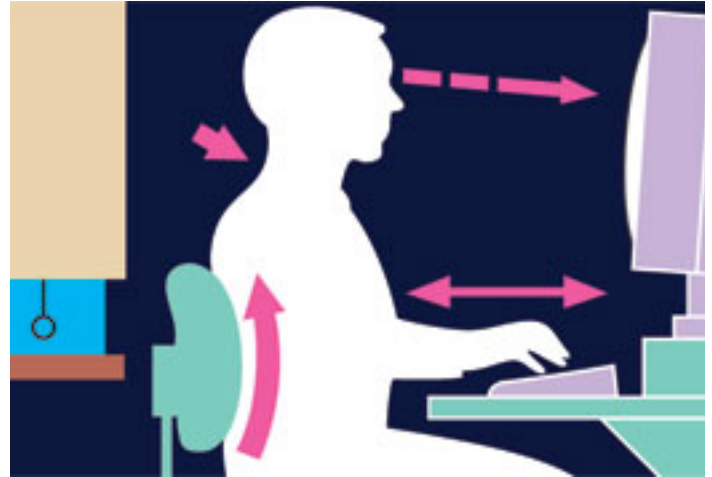
Many workplace injuries are repetitive-stress injuries or cumulative-trauma disorders. These injuries occur when abnormal stresses are repeatedly placed on normal joints by poor posture or poor joint position during the performance of a task.

Many of these stresses are caused by poor workstation design and/or repetitive task performance. In addition, poor posture at the workstation can be detrimental. For example, prolonged use of a computer or a mouse, particularly when the work area is not designed well, can lead to carpal tunnel syndrome and/or neck and arm pain.

Many modern product manufacturers are designing their products ergonomically, blending form with function. Such products fit the worker's actions while on the job and make tasks safer and easier to perform.

What are good ergonomics?

According to the United States Department of Health and Human Services, ergonomics is the science of fitting workplace conditions and job demands to employee capabilities. An ergonomic assessment of the workplace critically appraises the physical work environment—followed by changes based on the assessment. Ergonomic principles are then used to make the workplace compatible with the employee, improving the employee's safety and productivity. In



other words, the easier it is to do a job physically, the more productive and happy the worker will be.

Ergonomics is the science of fitting workplace conditions and job demands to employee capabilities.

When working at a desk, try these suggestions for greater comfort:

1. Choose a desk that is the proper height for your body. All items on your desk should be within easy reach.
2. Your feet should be touching the floor, with the legs and body forming an angle of 90 to 110 degrees.
3. Keep your body straight with the head and neck upright and looking forward, not to the side. Do not hunch over or slouch.
4. Adjust the height of your monitor. Look forward with your head in a neutral position. Your eyes should be at the same height as the top of the monitor. Leaning your head forward can lead to headaches and neck pain.

5. When typing, keep your wrists straight, your shoulders perpendicular to the floor, and your forearms parallel to the floor.

6. When reading at your desk, use a bookstand or a paper holder to keep your eyes in the same neutral position you use to read documents on your computer monitor.

7. When talking on the phone, use a headset whenever possible—especially if you talk on the phone for prolonged periods. Holding the phone between your shoulder and cheek will only lead to neck pain and headaches.

8. Stand up and stretch your legs with a short walk about every 20 to 30 minutes.

9. Take micro-breaks often, stretching your neck, arms and wrists, back, and legs. Simple stretches include neck rotations, fist clenches, arm dangles, and shoulder shrugs.

10. If your eyes must concentrate on a particular object for long periods, relax your eye muscles by shifting your focus from objects close to you to objects that are farther away. This helps reduce eye strain.

When working with a computer mouse, try the following:

- Don't move the mouse with just your wrist. Use your entire arm and shoulder.
- Don't rest your arm on the edge of the desk while manipulating the mouse.
- Hold the mouse loosely.
- Keep your wrist relaxed. Don't hold it up or down; instead, hold it in a neutral (straight) position.
- Step away from the mouse several times per hour and move your wrists, arms, and shoulders around.
- Consider using an ergonomically designed keyboard. ■



For more information on prevention and wellness, or to find a doctor of chiropractic near you, visit ACA's website at www.acatoday.org/patients.