ERGONOMICS BULLETIN

Has Working on Your Computer Become a Pain in the Neck?

What are Cumulative Trauma Disorders (CTDs)?
CTDs are injuries of the musculoskeletal and nervous systems that may be caused by repetitive tasks, forceful exertion, vibration, mechanical compression (pressing against hard surfaces), or sustained or awkward positions. Carpal Tunnel Syndrome and Tendinitis are examples of CTDs. CTDs can also result from activities other than work that involve repetitive motions or sustained awkward positions, such as sports or hobbies.

What are symptoms of CTD?
- Numbness
- Swelling
- Pain
- Redness
- Tingling
- Cracking or popping of joints

If symptoms last for at least one week or if they occur on many occasions, a doctor should be consulted.

How are CTDs Prevented in Office Workers?
Careful positioning of the body at the video display terminal (VDT) can reduce the likelihood of injury. In some cases, furniture may have to be readjusted or replaced in order to allow for good working postures.

- Wrist should be in a neutral position that is, not flexed or dropped.
- The least amount of pressure needed when striking the keys should be used.
- Feet should rest on the ground or a footrest to relieve pressure on the lower back.
- The head should face forward and be tilted slightly downward (5-30 degrees) in order to put the least demand on the neck and shoulders.
- Elbows should be almost at a right angle, or 70-135 degrees to avoid neck and shoulder pain.
- The material being worked on should be near the computer or typewriter. This will reduce reaching and twisting, which may strain the back and shoulders.
- Support the lower back and rest it by leaning back frequently and by supporting the arms.
- Do not stay in one working posture. Take frequent breaks from VDT work.
Here are some additional items to keep in mind regarding furniture:

- Chairs should have 5 legs and the ability to swivel.
- Chair heights should be adjustable and seats should tilt back and slightly forward.
- Chairs should be upholstered and seat edges should be rounded.
- Chair backrests should have lumbar support which should be adjustable in height.
- VDT monitors should tilt and swivel. Glare, which may force the worker into awkward postures, should be avoided.
- VDT tables should be height adjustable.
- Soft wrist rests, document holders and adjustable footrests should be available.

If you have any questions regarding health and safety, please contact Environmental Health & Safety at (718) 430-4150 or check the web site at www.einstein.yu.edu/ehs