

Keyboard Safety & Work Station Ergonomics

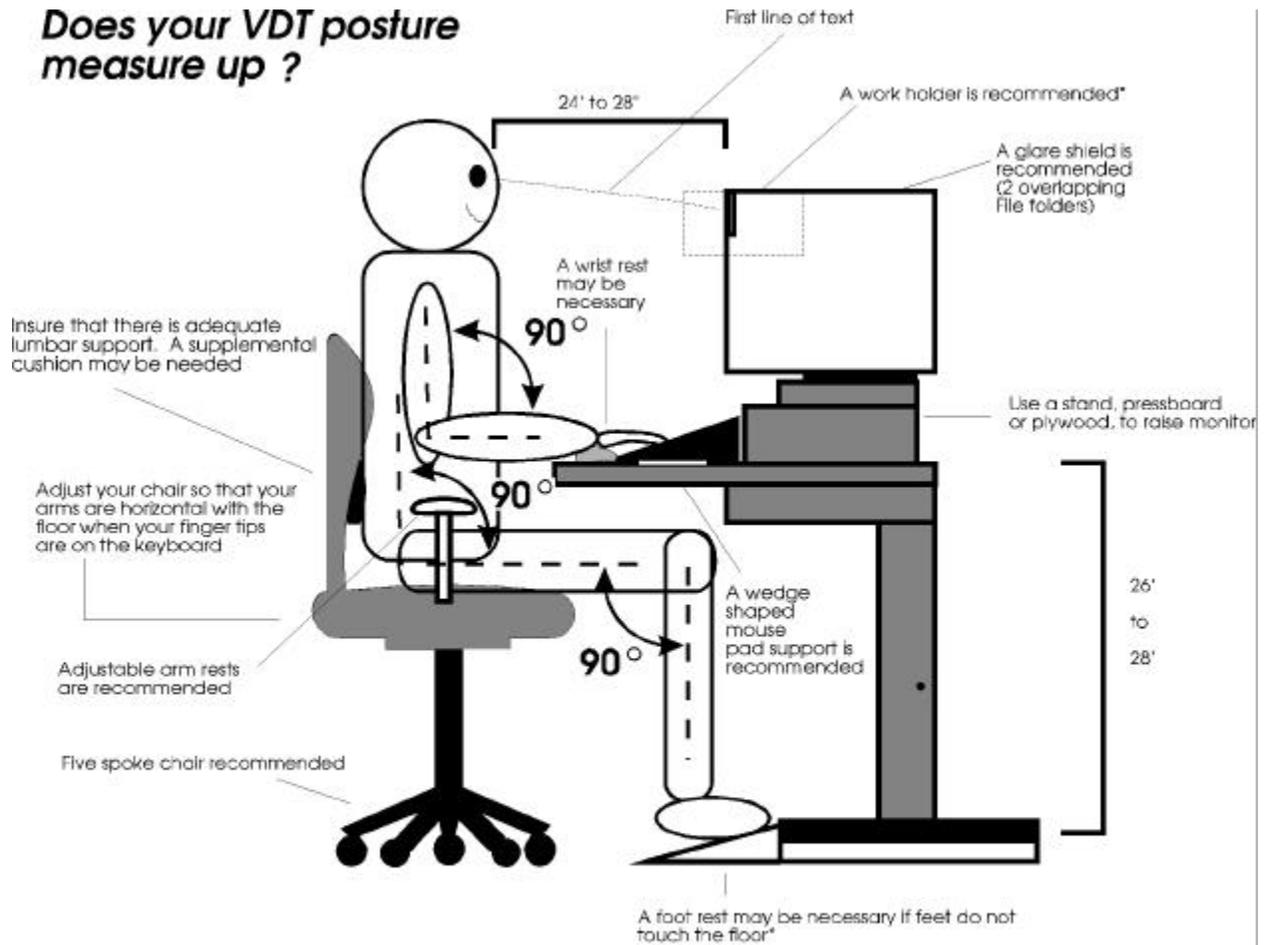
Ergonomics refers to whether or not your chair, desk, computer table, keyboard and computer monitor, etc. are properly adjusted to your physical stature during the performance of your work tasks. Improper adjustment can cause, neck ache, shoulder ache, pain or discomfort in your wrists or hands, poor circulation, etc. Repetitive use injuries are rapidly becoming a leading cause of lost work time. Your chair is a common source of these problems. It is very important that you check the adjustment of your chair. Check the seat height and the tension on the back support. Proper adjustment includes:

- Setting the seat height so that your finger tips are slightly higher than the tips of your elbows when touching the keyboard (see graphics on following pages). This may require chair or table height adjustment. The upper portion of your legs should be horizontal with the floor and the lower portion of your legs are perpendicular to the floor. Your feet should be flat on the floor or on a foot support. A back support may be necessary if your chair is not ergonomically designed.
- When using a computer or terminal, the top of the monitor should be level with your eyes so that you are looking downward slightly at the screen. Glare from windows or other light source should be avoided. A glare shield can be placed over the top of the monitor to reduce reflection or glare. (Two overlapping file folders can be used as a glare shield. Caution--do not cover up heat vents in the monitor). A glare shield may make it difficult to see the screen and has not been proven to be cost effective.
- You should be sitting directly in front of the keyboard and monitor, with both feet on the floor or a foot support.
- It is recommended that you get up, stretch, and walk around the room periodically before continuing keyboard work (keyboard used four (4) or more hours per day or more). Sample ergonomic exercises are on the following pages. Other exercises are available in Human Resources.

We have had isolated reports of repetitive work task medical problems such as tendinitis, overuse syndrome and carpal tunnel syndrome, as well as, the ongoing cases of muscle tension and fatigue that may produce periodic pain and discomfort. To avoid such problems, proper work station adjustment and posture is extremely important.

Again, adjust your chair and monitor height properly; sit directly in front of your keyboard and monitor; and, if it is necessary to spend a lot of time working at a keyboard, get up, stretch, and walk across the room for a few minutes, periodically, before continuing with your keyboard work tasks.

Does your VDT posture measure up ?



Please refer to the previous page for specific information about proper keyboard ergonomics (work station posture).

If you spend much time at a VDT, compare your own situation to the above illustration. See how arms and legs are at 90 degree angles to the body? Notice how wrists extend in a straight line from the elbows through the finger tips. This is important in preventing injury to your hand and arms. You may need to make adjustments if your posture and work station ergonomics do not comply with these recommendations.

*** Available at the Office Supply Store in Strong Hall.**

Improper work station location/adjustment or improper posture can result in a variety of medical problems. The following is information about what can result if steps are not taken to insure that the working environment and employee posture is properly managed from an ergonomic standpoint:

- **Eye Strain.** This can occur if a keyboard operator spends extremely long periods of time in front of a VDT, day after day. Eye strain is not considered to be a continuing, cumulative problem. Closing the eyes for a few minutes periodically; focusing on a distant object; choosing alternate work tasks; using eye drops; avoiding glare; etc., usually clears up this condition.
- **Moderate Aches and Pains.** Continued use of a PC/VDT, particularly, where proper ergonomics/posture is not taken into consideration, can result in wrist or arm discomfort, head ache, neck ache, back ache, shoulder ache, etc. First, insure that the work station is properly adjusted and correct posture is employed (see reverse side). Then, if symptoms continue, stretch periodically; get up and move around for a few minutes; choose an alternative work task; etc. This will generally relieve these symptoms.
- **Chronic Pain.** If the steps suggested above are not effective and pain or discomfort make it difficult to come to work or continue to work, you should advise your supervisor and call the Lawrence Memorial Hospital Occupational Health Clinic at 749-6467. The clinic is open Monday thru Friday from 8:00 a.m. to 5:00 p.m. If there is extreme pain or discomfort, you could go directly to the Lawrence Memorial Hospital Emergency Room for treatment seven (7) days per week, twenty-four (24) hours per day. An 1101-A form must be completed and the case called in on the accident hot line at (913) 296-0827. In such cases, tendinitis, overuse syndrome, or Carpal Tunnel Syndrome could exist. Treatment can include medication; a medical leave of absence; physical therapy; or, even surgery, if the diagnosis is Carpal Tunnel Syndrome.

AN IMPORTANT POINT IS THAT MEDICAL TREATMENT, INCLUDING SURGERY, MAY NOT PREVENT A REOCCURRENCE OF SYMPTOMS IF NEEDED MODIFICATIONS ARE NOT MADE IN THE WORK STATION OR EMPLOYEE'S POSTURE.

If there are questions about proper work station adjustment, posture or physical concerns, please feel free to contact the Environment, Health and Safety Dept. at 864-4089. Work site inspections may be arranged upon request.

DO NOT DO THESE EXERCISES IF THEY CAUSE PAIN. CONSULT YOUR DOCTOR!
WRIST AND FOREARM STRETCHES:

A: Upper forearm stretch

1. Sit with feet flat on floor.
2. Extend both arms in front of you, palms down.
3. Make a light fist with your left hand, thumb tucked in.
4. Grab hold of knuckles of your left hand so that your right thumb crisscrosses over your left thumb.
5. Bending, pull left hand down with your right hand, keeping both elbows straight.
6. Rotate your arms counter clockwise.
7. Rotate your arms clockwise.
8. Open the fingers of your left hand and gently stretch more.
9. Follow steps 1-8 above with the right hand.
Keep your shoulders relaxed.

Keep your shoulders relaxed.

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DO NOT DO THESE EXERCISES IF THEY CAUSE PAIN. CONSULT YOUR DOCTOR!
WRIST AND FOREARM STRETCHES:

B: Under forearm stretch

1. Sit with feet flat on floor.
2. Extend your left arm in front of you, palm up.
3. Using the fingers of your right hand, pull left hand down with your right hand, keeping both elbows straight.
4. Rotate your arms counter clockwise.
5. Rotate your arms clockwise.
6. Follow steps 1-6 above with the right hand.

Keep your shoulders relaxed.

