

Ergonomics...what is Ergonomics?

Ergonomics...what is ergonomics? The word ergonomics (*from the Greek word "ergon" meaning work, and "nomoi" meaning natural laws*), is the practice of adapting equipment and the human to each other for optimal safety and user comfort.

Most of us use computers at home and at work, and a great number of people use these products for extended periods of time. Computers and related products, such as computer desks and chairs, are frequently the focus of ergonomic design and practices. If these products are improperly adjusted for human use, the person using them may suffer unnecessary fatigue, stress, and even injury.

You should arrange your computer and related products so that they are ergonomically correct:

- Desk arranged to allow easy access to all necessary tools and equipment.
- Seat height that allows your feet to rest flat on the floor or on a footrest.
- Backrest with an adjustable lumbar support.
- Computer monitor placed directly in front of you, placed so that your eyes are aligned with a point 2 to 3 inches below the top of the screen, and located an arm's length from the user.

Use the keyboard safely by placing your hands and wrists in a neutral position with elbows close to your bodies. In addition:

- Wrists should be flat (not bent) and in line with forearms.
- Do not rest wrists on a wrist rest when typing.
- Control the mouse movement from the elbow while keeping the wrist straight and neutral.

Use these exercises to protect yourself from ergonomic injuries:

- Relax hands by making a fist, then extending and spreading the fingers. Repeat several times.
- Shrug shoulders—roll shoulders forward and back.
- Stretch neck by rotating the head up and down, turning from side to side, and tilting the head toward each shoulder.
- Bend forward in a chair and touch the floor.
- Stand up, place hands on hips, and bend backwards.
- Change position at least every hour.
- Get up and walk to the printer or copier or get a drink of water.
- Every 15 minutes, look away from the monitor and focus on something at a distance of about 20 feet.

If you use a personal digital assistant (PDA), which is a small mobile hand-held device also known as a palmtop computer, use it with care. Using these devices over a long period of time can lead to repetitive motion injuries if you don't know how to use them ergonomically. The problem occurs when gripping the PDA in the palm of the hand between the four fingers and the fatty pad below the thumb, and using the thumb of the same hand to type on the tiny keypad. This can aggravate arthritis and lead to tendonitis of the thumb.

Here are some tips from the American Physical Therapy Association:

- Take frequent breaks from your PDA. Don't type for more than a few minutes.
- Write fewer and shorter messages. Abbreviate your responses.
- Don't use your thumb for typing; use the fingers of the other hand instead.
- Stretch your fingers periodically; hold the stretch for 10 seconds, and repeat it 8 times.

When we share the responsibility for safety in the workplace, everyone wins!!