



Short Safety Subject

Short Safety Subjects are provided by the Public Safety Business Center, Fort Bragg, NC. Our intent is to provide safety topics for the purpose of increasing safety awareness and improving safety performance. Additional Short Safety Subjects are available on the PSBC Business Management Web Site at:

www.bragg.army.mil/psbc-bm/PubsAndForms/ShortSafetySubjects.htm

Don't Get Sore At Your Computer



It's hard to imagine getting along without computers today. Many of us spend hours at the keyboard - both at home and at work - writing letters, reports, memos, keeping records, etc. With a computer, we can do most of our work sitting in one place - with little need to go to the file cabinet, the pencil sharpener, or the mailbox any more. As a result, many people stay fixed in front of their monitor for hours at a time - which is not a normal, healthy way for the body to operate. Muscles, tendons and joints put up with it for a while, but then give us feedback in the form of stiffness or pain in arms, wrists, shoulders or back. Do you listen when your body talks, or do you wait until it shouts?

Discomfort may start as fatigue, mild soreness or numbness. It can develop into chronic pain that doesn't go away, for those who fail to heed the early warning signals. If you suffer such discomfort, it is probably because:

- 1) blood circulation in your muscles is poor while you're working.
- 2) you are holding stressful body positions for long periods of time.

Muscles are made for moving! Body movement circulates important oxygen and nutrients to muscle tissue. Strong muscles *can* be tensed and held without movement, for example when arm wrestling, but if "static" muscle contraction continues for very long, a substance called lactic acid is produced in muscle tissue, causing pain. This can happen over long periods of time when you ask your muscles to "hold you up" in your chair; "hold your head erect;" and hold your hands "suspended" over the keyboard or the mouse. A lack of active movement and healthy blood circulation often leads to muscle fatigue. It is particularly harmful if your arm must reach out from your body for long periods of time, to manipulate the mouse. What to do about the problem? Move! Stretch! Take breaks! Stretch again! Keep blood circulating through the chain of muscles in your upper body. Stre-e-e-t-c-h! Shoulders and upper back seem particularly vulnerable, so shrug, roll, and move them around often. Do this *before* your body starts shouting at you!

Put your joints in "neutral!" If the wrist is not maintained in a "neutral" position during prolonged computer use, operators may suffer maladies such as Carpal Tunnel Syndrome. Neutral, in this case, means the wrist must not be bent up or down, to one side or the other, while fingering the keys or using the mouse. In very simple terms, a bent wrist can "pinch" nerves in the wrist over time, causing nerve damage and chronic pain. "Neutral" also applies to other parts

of the body, which should be kept in the least stressful working position - with minimal effort needed to hold them there. What to do about work position problems? Raise, lower or reposition your keyboard, to keep your wrist in a neutral position and your elbows positioned close to your body. Obtain one of the many hand or wrist supports that help achieve the same goal. Locate the mouse in close proximity to the keyboard, so you won't have to reach out, or arrange your work area so your working forearm rests on the surface of the desk. Raise the level of the monitor so your head rests squarely on your shoulders, and your neck and upper back muscles won't strain to hold it erect. Get acquainted with your chair - should it be raised or lowered?

Work station layouts and individual body types are all uniquely different, so there is no *single*, magic prescription. But there *are* a variety of solutions to help avoid muscle fatigue, stress and pain. Every computer operator should learn which of these will work best for them.