



## 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](http://www.bragg.army.mil/psbc-bm/PubsAndForms/ShortSafetySubjects.htm)

### Personal Ergonomics

**What is Ergonomics?** Ergonomics is the science of matching tools and tasks to the work environment. In other words, ergonomics tries to make your job fit you, rather than making you fit your job. The purpose of ergonomics is to reduce or eliminate injuries and illnesses that can result from stress on muscles, nerves, and joints. These types of injuries have been common to workplaces for a long time, but safety standards concerning them are new.

A variety of ergonomically - related injuries take place and a variety of terms exist to describe them. The most common terms used are musculoskeletal disorders or cumulative trauma disorders (CTDs). They are also known as repetitive motion or stress disorders. Whatever they're called, they account for approximately one-half of all reported workplace illnesses each year. These are technically called "illnesses" because the problems generally build up over time, rather than being the result of a single event, as in the case of an accident.

**Physical problems from cumulative trauma:** These usually involve pain and damage to muscles, tendons, and nerves in the back, neck, shoulders, wrists, hands, and elbows. Discomfort can be mild and periodic, or long lasting. Typical ailments include: Tendonitis, "Tennis Elbow," Trigger Finger, lower back pain, Carpal Tunnel Syndrome which causes hands and wrists to tingle or become numb, and Reynauds Syndrome which causes fingers to become white.

Disorders can be caused by making the same motion over and over, staying in one position too long, or working in awkward positions. They also result from working with tools that don't fit the body, using a great deal of physical force, and exposure to long periods of heavy vibration.

**How To Avoid Discomfort:** Ergonomically related disorders occur to all types of workers, from laborers to office personnel. You can often help yourself by learning and practicing basic ergonomic principals. There are many ways to reduce or eliminate the disorder; here are a few:

- Use two hands instead of one for a task - to reduce excess demand on a single muscle group.
- Use tools that are right for the job and proportioned for your body.
- Use power tools instead of manual tools when possible.
- Take frequent breaks from repetitive motion tasks.
- Avoid repeating awkward movements or holding yourself in awkward positions.
- Wear protective gloves that reduce pressure or tool vibration on your fingers.

- For computer use - keep the screen 12 to 18 inches from your face and just below eye level.
- Position the keyboard so that your wrists are straight and your elbows are close to your body.
- Change positions, stretch often to improve blood circulation, and take breaks regularly.

**Report Early Symptoms:** Repetitive motion injuries are a growing concern in the workplace. Anyone who experiences numbness, tingling or pain in their hands, arms or neck should seek the advice of a supervisor. Changes in work stations and equipment can often alleviate these problems before they become chronic, and medical attention should be sought if the problem persists. Following this simple advice can help eliminate physical stress and keep you feeling good all day.