

Ergonomic Injuries

Good ergonomics adapts the job to the person instead of forcing the person to fit the job. It reduces physical strain, pain, and possibly serious injury.

Poor ergonomics causes painful musculoskeletal disorders, also called cumulative trauma disorders (CTDs), such as carpal tunnel syndrome and various kinds of tendon inflammation. These are painful, sometimes crippling, injuries that generally affect upper body nerves, tendons, tendon sheaths and muscles. They may develop from frequent:

- Repetitive motions on a machine or keyboard, packing, cutting, etc.
- Forceful exertion of your arm or hand
- Use of vibrating or impact tools
- Awkward positions or movements

Carpal tunnel syndrome, a common CTD, occurs when the nerve that runs through the wrist's carpal tunnel is pinched. Women are three times more likely than men to develop carpal tunnel syndrome, perhaps because the carpal tunnel itself may be smaller in women than in men. The dominant hand is usually affected first and produces the most severe pain. Persons with diabetes or other metabolic disorders that directly affect the body's nerves and make them more susceptible to compression are also at high risk. Carpal tunnel syndrome usually occurs only in adults.

Good Ergonomics = a task or tool that:

- ◆ **Minimizes repetitive motions**
- ◆ **Alternates repetitive motions with other tasks**
- ◆ **Positions the work surface waist high**
- ◆ **Places tools and materials within 20 inches**
- ◆ **Uses a chair with adjustable height and back support**
- ◆ **Positions a computer keyboard for work with wrists straight, elbows at right angles, and arms resting at sides**
- ◆ **Has light, easy grip tools that don't require extreme effort**
- ◆ **Grips tools so that thumb and index finger overlap slightly**
- ◆ **Avoids bending wrists**
- ◆ **Use mechanical aids to hold materials such as clamps or jigs**

Don't Ignore Symptoms of Ergonomic Injuries!!!

Most CTD's are preventable and curable if caught early. The key is to notice trouble when it starts — and do something about it. Early signs may include persistent pain, tingling, numbness, burning, aching, or weakness. The signs may be constant or may occur mostly after certain activities. The drastic cures — such as surgery — are not reliable and should be a last resort. Nevertheless, a health professional should be consulted when you are concerned about possible early signs.