

Ergonomics is the science of fitting a job to a worker and a product to its user. 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. Most people are familiar with ergonomics as the science that helps to make you more comfortable as you sit in your office chairs and work at your computers. However, ergonomics is more than adjusting chairs and moving monitors. Ergonomics is also used in the design of industrial workstations, vehicle interiors, tools, appliances, etc.

Musculoskeletal Disorders are also sometimes referred to as repetitive strain injuries, soft tissue injuries and cumulative trauma disorders. Physical problems from MSDs usually involve pain and damage to muscles, tendons, and nerves in the back, neck, shoulders, wrists, hands, and elbows. Many of these problems 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 your body, using a lot of physical force, and exposure to long periods of heavy vibration.

With the explosion of laptop use, there has been many laptop related injuries. Although laptops have poor ergonomic design, by combining proper equipment positioning, viewing angles, and typing level, the chances of you suffering from an ergonomic injury is significantly reduced. If you are using a laptop for the majority of the day, it must be ergonomically retrofitted which includes: 1) Positioning the laptop directly in front of you, 2) Raising the laptop so your neck is not bent, 3) Using a separate keyboard tray, and 4) Placing the computer mouse at the same level as the keyboard.

Often the cause of back pain is hard to determine. The lower back supports most of the weight and stress of your body; the pain generally comes from the strained muscles and ligaments caused due to heavy lifting or awkward postures. Back pain may be caused by poor posture, lifting and handling heavy loads, forceful pushing or pulling, bending or twisting, psychological stress, and inadequate rest periods.

To prevent back injury caused by lifting, first assess the object that needs to be lifted. Ask yourself questions like: Does the object need to be lifted in the first place? Or, can a tool be used? If it does need to be lifted, plan the lift by making sure the walking path is clear of hazards. Next, inspect the lift; Are there handles? What is the weight? Does the lift require awkward postures? When lifting the load, stretch, stand as close as possible, make sure it's not too heavy, and lift slowly with your legs and not your back. When lowering the load, squat down and stand up slowly when its been placed on the desired location.

There are lots of ways to reduce or eliminate general ergonomically-related symptoms. To name a few:

- Use two hands instead of one for a task to reduce demand on a single muscle group.
- Stretch and exercise to promote circulation and lessen muscle tension
- Use tools that are right for the job and well-proportioned for your body.
- Take breaks from repetitive motion tasks.
- Avoid repeating awkward movements or holding yourself in awkward positions.

It is important to report early symptoms. Repetitive motion injuries are a growing concern in the workplace. If you experience numbness, tingling or pain in your hands, arms or neck, tell a supervisor. Changes in work stations and equipment can often reduce these problems before they become chronic, and medical attention is required if the problem is ongoing. Following this simple advice can help eliminate physical stress and keep you feeling good all day!