

### Introduction

What is ergonomics and how does it influence us in the office? Ergonomics is the study of the relationship between people, their work and their environments. The goal of an ergonomic assessment of your workstation is to help the body move in natural ways and reduce stressors that might cause damage and pain.

## Causes of Musculoskeletal Disorders

The most common ergonomic pains result from strains on the neck, low back, shoulders, elbows, wrists, hands and eyes. Injuries generally occur due to one or more four primary risk factors: awkward postures, using excessive force, repetitive motion or contact stress. In addition, the way you lift and move your body can

contribute to various disorders.

#### **Be Flexible**

Even when your work does not require great physical exertion, moving the body repeatedly in ways that it is not ready to move or using muscle groups that haven't been warmed up for work is a common cause of pain. There is real value in practicing some basic stretching exercises to prepare our bodies for work.

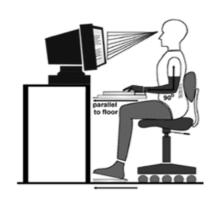
Performing simple stretching exercises throughout the day for hands, wrists, back and neck can help avoid problems. Hands and wrists should be stretched so they are ready to perform the typical tasks required at work, especially typing. Your neck can be stretched gently from side to side and then from front to back. Your back can be stretched while sitting in a

*,,,,,,,,,,,,,,,,,,,,,,,,,*,,,,,,,,

chair by bending your chin toward your knees.

### **Proper Computer Position**

One of the biggest ergonomic risk factors is the use of computers at work. Improper positioning of the computer or workstation can cause various disorders, but those problems can be avoided by following a few simple guidelines. This diagram shows the proper computer position, which reduces the stressors that cause varied disorders.



# 

When using a computer, remember some basic rules:

**Rule #1**: Keep your neck in an upright position so the screen is at or is slightly below eye level.

**Rule #2**: The monitor should be at least 18" from your eyes.

**Rule #3**: Keep your elbows at the sides of the body and at a right angle to the keyboard.

**Rule #4**: Keep your wrists in a straight or neutral position to avoid stressors on the carpel tunnel.

**Rule #5**: Avoid excessive force. Do not grip the mouse too tightly or type in the same position for too long.

### **Lifting Correctly**

Whether lifting heavy objects, i.e., stacks of files or paper, is a part of your everyday tasks or a rare occurrence, it is important to follow proper lifting procedures to prevent injuries and serious pain.

First, when lifting, size up what is going to be lifted. If it is too awkward, too big or too heavy, do not hesitate to ask for help. Effective workers don't risk hurting themselves; they seek help when necessary.

Second, always lift with your legs and never with your back. Your legs are your biggest muscles and are designed to lift heavier objects. Use them to lift items off the ground instead of your back.

### **Don't Hesitate to Ask Questions**

Your agency is very interested in making sure everyone is able to work without pain. If you have any questions regarding the way your work area is set up, please speak up.

Never bend at your waist when you are lifting heavier objects, because you will end up having low back pain, and that pain can indicate musculoskeletal disorders.

Third, avoid lifting and twisting all in the same motion. Your first goal is to get the object off the ground and then, once your legs are straight, you can move your legs instead of twisting your back.

### Ways to Avoid Stress

Much has been said about redesigning workstations and taking action against musculoskeletal disorders, repetitive motion injuries and other ergonomic-related problems. One of the best ways to avoid pain is to recognize that muscles need periodic rest.

As you are working, take a break at regular intervals to allow muscles to rest, and stretch them thoroughly. If you are sitting, stand up and stretch. If you have been typing for a while, stop and stretch your hands and wrists. If you have been standing for long

periods, sit down and stretch your back out. If you can, alter your work and use different muscle groups, switch your work position after a period of time to give one set of muscle groups a rest while using others. Sometimes a little common sense can go a very long way in reducing painful situations.

### **Closing Thoughts**

When you have workstation design issues that need to be reviewed, bring this information to your supervisor's attention right away. Your agency is very interested in making sure everyone is able to work without pain. If you have any questions regarding the way your work area is set up, please speak up.