SET SEG
School Insurance Specialists

ERGONOMICS

Ergonomics is the science of matching the workplace and the task to be performed to human capabilities and limitations. There are four basic ergonomic injuries that can occur:

- Cumulative Trauma Disorder (CTD) – Injuries or disorders which are generally work related.
- Carpal Tunnel Syndrome (CTS) – Injuries to the meta-carpals or supporting structures of the hand.
- Repetitive Motion Injuries (RMI) – Injuries resulting from continued movement.
- Repetitive Strain Injuries (RSI) – Injuries resulting from repeated strains of the same parts.

BACK INJURIES

The most costly and common ergonomic injuries involve the back. There are several things employees can do to help prevent back injuries. (Check with your doctor before engaging in new exercises.)

EXERCISE TO STRENGTHEN YOUR BACK AND REDUCE STRESS

Simple back-toning exercises can strengthen your back and your stomach muscles and aid in stress reduction.

LOSE EXCESS WEIGHT

Excess weight puts extra force on back and stomach muscles. By losing weight, you can reduce strain and pain in your back.

MAINTAIN GOOD POSTURE

Refrain from slouching when sitting or standing. Stand tall with your head up and shoulders back. Drive with your back straight against the seat and close enough to the wheel so your knees are bent and are slightly higher than your hips.

CLERICAL WORK

A large exposure to ergonomic injuries involve clerical workers who tend to sit long hours or work closely at a desk during the entire workday. Most clerical ergonomic injuries occur because of poor work station design and bad working habits.

There are several seating guidelines for proper clerical set-up including:

- **ARMS:** resting comfortably at sides
- **ELBOWS:** at keyboard height, bent to an approximate 90° angle
- **FOREARMS:** parallel to the floor
- **WRISTS:** straight
- **FINGERS:** resting comfortably at the keyboard
- **HEAD:** positioned vertically with the chin level
- **THIGHS:** parallel to the floor
- **KNEES:** bent to an approximate 90° angle
- **FEET:** flat on the floor or on a footrest

Continued on back

Ergonomics Continued...

MINIMIZE BACK PAIN:

- Sit with the body correctly aligned, changing sitting positions frequently
- Adjust chairs to provide the proper lumbar support
- Stand up, stretch, and take brief walks

MINIMIZE ARM AND HAND FATIGUE:

- Position the wrist in the "natural" or straight position while typing; avoid extreme hand reaches
- Avoid side to side wrist movements when using the mouse
- Adjust keyboard or articulating drawer for height, distance from body, and angle
- Keep hands relaxed at the keyboard; stretch periodically

MINIMIZE EYE STRAIN:

- Avoid prolonged fixation on the screen
- Position monitor within an arm's reach and away from direct light or glare
- Adjust screen controls for brightness and contrast
- Use a document holder to position source documents vertically at the same height as the eyes

LIFTING

Many people perform lifts incorrectly, resulting in strain on their back and surrounding muscles. Before you lift, consider the weight of the object and the distance you will be moving it.

POSITION YOURSELF CORRECTLY IN FRONT OF THE LOAD

Align yourself correctly in front of the load and slowly squat down by bending your knees. Using both hands, firmly grab the load and bring it as close to your body as you can.

LIFT WITH YOUR LEGS NOT YOUR BACK

Once the load is close to your body, slowly straighten out your legs until you are standing upright. If you need to turn to the side, turn by moving your feet around and not by twisting at your stomach.

SET THE LOAD DOWN CORRECTLY

Squat down by bending your knees and position the load out in front of you. Set the load down slowly and maintain your contact with it until you are sure the load is secure.

GET HELP IF NEEDED

If the load is too heavy, bulky or awkward for you to lift alone, find a friend to help you carry it. Try to break the load into smaller loads; or locate a cart or dolly to help you move it.