

SECTION 7- OFFICE SAFETY

The U.S. Centers for Disease Control and Prevention states that , "Maintaining a healthy office environment requires attention to chemical hazards, equipment and work station design, physical environment (temperature, humidity, light, noise, ventilation, and space), task design, psychological factors (personal interactions, work pace, job control) and sometimes, chemical or other environmental exposures.

A well-designed office allows each employee to work comfortably without needing to over-reach, sit or stand too long, or use awkward postures (correct ergonomic design). Sometimes, equipment or furniture changes are the best solution to allow employees to work comfortably. On other occasions, the equipment may be satisfactory but the task could be redesigned. For example, studies have shown that those working at computers have less discomfort with short, hourly breaks.

Situations in offices that can lead to injury or illness range from physical hazards (such as cords across walkways, leaving low drawers open, objects falling from overhead) to task-related (speed or repetition, duration, job control, etc.), environmental (chemical or biological sources) or design-related hazards (such as nonadjustable furniture or equipment). Job stress that results when the requirements of the job do not match the capabilities or resources of the worker may also result in illness."

OFFICE SAFETY TRAINING

Budget Unit Heads of units with offices must conduct and document an initial safety orientation of all new employees who shall work in the office environments. Such orientation shall consist identifying those safety hazards associated with the offices and specifying those measures needed to minimize them. An excellent aid to use in this orientation is the Loss Prevention Unit of the Louisiana Office of Risk Management training module on Office Safety. This module is available through the La Tech EHS This training should be reviewed with all employees at any other time that new safety issues are introduced into the office environment.

TRIPS AND FALLS IN THE OFFICE SETTING

Falls are the most common source of disabling injury in the office environment.

To minimize exposure:

- Avoid thick carpeting. Have frayed carpeting repaired or replaced.
- Have loose floor boards and tiles repaired.
- Have tracked-in rain, spilled drinks, and other out-of-place liquids mopped up immediately.
- Pick up dropped pencils, paper clips, rubber bands, and paper.
- Keep cords from telephones, typewriters, computers, and other business office machines out of traffic areas and knee wells of desks.
- Use appropriate ladders and step stools to reach high objects.
- Close file and desk drawers immediately after completing a task.
- Use the handrail when climbing and descending stairs.
- Move quickly enough to be efficient, slowly enough to be cautious.

BACK SAFETY IN THE OFFICE SETTING

"Bad chairs" are a major cause of back injuries and can be avoided by using "good" chairs that have:

- The front of a work chair, rounded off to avoid restricting blood flow in the under part of the thighs.
- Support for the lumbar vertebrae (at the base of the spine). This helps the back to hold a slight forward arch.
- But while all researchers recommend lumbar support, opinions vary widely on exactly where the backrest should be located, how high it should be, and of what contour. Set the back of your

- chair to a position which is comfortable for you.
- Seat cushions that have only light padding so that the buttocks can change pressure areas easily-. If it is too soft, it puts pressure under the thighs, locks the hip bones upward, and pinches the underside of the socket joint.
 - The backrest- be either left open or so strongly concave that the ischium - the lower most part of the hip bone on which the body rests when sitting - can be rotated backward without hindrance. This also allows for air circulation.
 - Adjustable seat height- Different researchers recommend ranges from 6 to 9 1/2 inches of adjustability.
 - Footrests which should be utilized for two reasons:- for shorter people who must adjust their chairs too high in order to comfortably work at their desks; and for improving the angle of the foot when it is in a resting position.
 - Have some mechanism for leaning the seat backward in order to rest strained back muscles.

STRESS WHEN WORKING IN AN OFFICE SETTING

Stress can create an environment for illness or accidents to happen, but not all stress can be avoided or counteracted. However, the following tips may aid in relieving physical stress:

- Keep your neck and back in as natural a line as possible with your spine. Bend forward from the hips, but don't arch your lower back.
- Use a footrest to relieve swayback. The idea is to have your knees higher than your hips.
- A few leg exercises at your chair during the day can minimize circulatory problems. For example, lift and lower your heels while keeping your toes on the floor; move your feet up and down while keeping your heels on the floor; and swing your legs back and forth at the knees. Even better, of course, is to walk around from time to time.
- Similarly, a few neck and shoulder exercises can relieve tension from prolonged sitting. For example, lift your shoulders to your ears and drop them down into a relaxed position; move your head up and down, side to side, and in a circular motion; and rotate your shoulders in a circular motion.

FIRE SAFETY IN OFFICES

The following reminders are offered:

Electrical

1. Some inappropriate use of extension cords are:

- Using them as permanent wiring.
- Using unapproved extension cords.
- Overloading power capabilities of the cord during temporary use.
- "Daisy chaining" (plugging one extension cord into another and another, etc.)
- Using one surge protector/power strip to power another

Utilize extension cords for temporary service only. Arrange for additional permanent electrical service, if necessary.

2. Keep all cords out of traffic paths.

3. Unplug electrical appliances by the plug-head, not by pulling the wires.

Flammables, such as rubber cement thinner, white-out thinner, and some cleaners and solvents)

- Limit the amount on hand.

Fire/Fire Alarms (see "Fire Safety" section for more details)

- If you see a fire: Sound the alarm, get others to safety. Leave by the nearest safe exit. Call the University Police at 257-4018 from a safe location to confirm the alarm.
- If you hear an alarm: Treat it as real. Natural gas leaks and fires in many new synthetic materials give no safe early warnings such as burning odor or visible smoke. Leave by the nearest exit.

OFFICE MACHINE SAFETY

Generally, moving parts of office machines are well-guarded, but precautions are still necessary. Many manufacturers either post safety rules on their equipment or provide booklets. Be familiar with these rules. The following tips are offered for some equipment:

- Paper cutters: Keep the blade handle locked down when it is not being used. Keep fingers away from the blade while cutting. Newer units have a finger guard at the blade.
- Moving machinery: When using paper shredders, duplicating machines, printers, etc., long hair should be kept up and/or back to avoid entanglement. Similarly, dangling jewelry and cuffs should be kept away from areas where they could be drawn into or caught on the machines.
- Spindles, staples, pins, letter openers, razor blades, and knives are all designed to cut, tear, and/or pierce. Care should be taken at all times. Cut away from yourself. Cap spindle points and blades with protective materials.
- Energy emitters: Copiers, microwave ovens, and laminating ovens all have built-in safety features to limit the emission of light and heat. Staring at intense light sources can lead to temporary vision problems. Servicing should be performed by trained personnel to avoid burns and electrical shocks.

ENVIRONMENTAL ISSUES IN OFFICES

Noise - Noise levels above 85 dBa is temporarily detrimental to health; above 80 dBa, it is disturbing to office work; above 70 dBa, it is distracting; above 60 dBa, it can interfere with conversation (receiving instructions). Normal office environment noise ranges from 60 - 70 dBa.

Light - For routine office work, 400 to 800 LUX (light measurement in the metric system) is recommended. For video display terminals (VDT's), less light is needed in order to maximize contrast of words on the VDT screen and to minimize glare on the screen resulting from overhead lighting. Individual "task" lighting may be needed to provide enough light to read printed copy. Large bright windows should be sufficiently covered with shades or curtains.

ERGONOMICS IN THE OFFICE SETTING

According to the U.S. Centers for Disease Control and Prevention, "Ergonomics is the scientific study of people at work. The goal of ergonomics is to reduce stress and eliminate injuries and disorders associated with the overuse of muscles, bad posture, and repeated tasks. This is accomplished by designing tasks, work spaces, controls, displays, tools, lighting, and equipment to fit the employee's physical capabilities and limitations." Ergonomics must be considered in the selection of any office furniture and equipment, and in the organization/utilization of assigned office space.