

OFFICE SAFETY

TRIPS AND FALLS

Falls are the most common source of disabling injury in the office environment. To minimize exposure:

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

BACK SAFETY

Falls are the leading cause of back injuries, followed closely by improper lifting and "bad" chairs. To avoid back injury from "bad" chairs, utilize "good" chairs.

1. The front of a work chair should be rounded off - often called a "scroll edge" or "waterfall cushion" - in order to avoid restricting blood flow in the underpart of the thighs.
2. Support for the lumbar vertebrae (at the base of the spine) should be provided, helping 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.
3. The seat cushions should 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.
4. Just above the surface of the seat, the backrest should 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.
5. Seat height should be adjustable. Different researchers recommend ranges from 6 to 9 1/2 inches of adjustability.
6. Footrests 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.
7. There should be some mechanism for leaning the seat backward in order to rest strained back muscles.

Other factors affecting office safety and health include the following:

STRESS

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:

1. 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.
2. Use a footrest to relieve swayback. The idea is to have your knees higher than your hips.
3. 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.
4. 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

The following reminders are offered:

Electricity

1. 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 (duplicating fluid, rubber cement thinner, white-out thinner, and some cleaners and solvents):

1. Limit the amount on hand.
2. Smoke in areas away from flammables and combustibles.

Fire/Fire Alarms

1. 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.
2. 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 MACHINES

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:

1. 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.
2. Moving machinery: When using typewriters, 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.
3. 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.

4. Energy emitters: Copiers, microwave ovens, microfiche readers, Thermofax machines, 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.

OFFICE ENVIRONMENT

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.

FIRE/SAFETY PRE-INSPECTION FORM FOR OFFICE AREAS

Included in Section XI is a Fire/Safety Pre-Inspection Form for Office Areas. The items on the form are items which the Environmental Health & Safety Department considers important for a safe office. You do not need to wait for the annual inspection to use the form. It can be your guide to a safer office. Every person who has an office should conduct an annual self-inspection. It can be your guide to a safer office. Call the Environmental Health & Safety Department if you have questions.

JOB SAFETY ANALYSIS

Another component of incident/accident investigation is job safety analysis. Job safety analysis is a procedure used to review work methods and uncover hazards that may result in incidents/accidents, The hazards might have been overlooked in the design of the building, workstation, equipment, tools, or processes, The hazards may have developed after the work procedure was designed, or they may be the result of a change in the work procedure or personnel.

Job safety analysis is one of the first steps in hazard prevention, incident/accident analysis and safety training because a hazard must be recognized before it can be eliminated. Therefore, job safety analysis should be performed on all tasks that have resulted in a trend, death, or a change in job procedures or equipment. There are three objectives in job safety analysis:

1. **To systematically evaluate jobs and work methods to eliminate hazards and potential hazards;**
2. **To develop a tool to assist in the teaching of safe work procedures, and**
3. **To provide a framework for incident/accident analysis,**

(See Section 11, Sample Procedure for Job Safety Analysis)