

---

## OFFICE SAFETY

---

### A. Introduction:

An office is like any other work environment in that it may present potential health and safety hazards. Most of these, however, may be minimized or eliminated by designing jobs and work places properly and by taking into account differences among tasks and individuals. Inadequate environmental conditions, such as noise, temperature and humidity may cause temporary discomforts and should be addressed upon recognition.

### B. How to Avoid Injury:

The following precautions represent just a cross section of possible ways to reduce hazards present during office activity:

- Every employee should be responsible to see that his/her own desk and work area is **clean and orderly**. Pick up items that may be strewn around.
- Always maintain a **clear path of travel** through walkways and in storage rooms.
- Be aware of tripping hazards such as loose or threadbare floor coverings.
- Be **extra cautious** when you come up to a door that can be opened in your direction. Take care when pushing open such a door.
- Haste when walking around and between desks can result in bruises and falls. Slow down when coming to “blind” corners.
- Keep electrical and computer cords out of aisle ways. Tape them down if necessary or use cord runners to prevent tripping hazards.
- All file, desk and table drawers shall be kept closed when not in use. Never open more than one file drawer at a time.
- **Do not overload** the top drawers of filing cabinets. If unfamiliar with filing cabinets, test the drawers and be careful not to pull them out to full extension. There may not be a locking device on inexpensive or older models. Store heavy items in lower drawers.
- Office tables, desks and chairs must be **maintained in good condition** and free from sharp corners, projecting edges, wobbly legs, etc.
- Tilting chairs can be hazardous when improperly used and care should be taken to assure that they are in good working condition. Do not tilt back in chairs that are not designed for this purpose.
- Never use chairs, desks or other office furniture as a makeshift ladder. When necessary, always use a stepladder. **Don't overreach** or lose your balance.
- Keep the blades of paper cutters closed when not in use. Store in a readily accessible location below waist level. Keep the blade of a utility knife covered.
- Keep hands, ties and dangling jewelry clear of electronic and mechanical equipment.
- Paper cuts can be painful and annoying. Use a sponge or other wetting devices for envelopes. Use rubber finger guards when working with stacks of paper.
- Learn how to operate all office machines correctly and safely. Follow instructions for use.
- Do not pile files, boxes and other materials so high that they can fall. Do not store heavy items on high furniture such as filing cabinets.
- **Clean up any spills**, such as coffee, immediately, especially if the spill is on the floor or on electrical equipment such as copiers or computers.
- When moving office equipment (example: desks and filing cabinets) **ask for help** and/or use a dolly. Keep fingers and toes out of the way to prevent crushing.

### **C. Noise:**

Noise can be defined very simply as unwanted sound. Whether a sound is classified as noise or not depends mostly on personal preferences. For noise in offices, the most common effects are interference with speech communication, annoyance, and distraction from mental activities. If the task requires a great deal of mental concentration, noise can be detrimental to performance.

Many unexpected noises cannot be controlled, as when someone accidentally drops something. For many of the annoying sounds in the office environment, the following measures are useful for reducing the effects of noise:

- Select the quietest equipment if possible.
- Properly maintain equipment, such as lubrication and tightening of loose parts that can cause noise.
- Locate loud equipment in areas where its effects are less detrimental.
- Use barriers, walls or dividers to isolate noise sources. Use of acoustically treated materials can absorb noise that might otherwise travel further. Rubber pads to insulate vibrating equipment can also help to reduce noise.
- Enclose equipment, such as printers with acoustical covers on housings.
- Schedule noisy tasks at times when it will have less of an effect on the other employees in the office.

### **D. Electrical Safety:**

Be sure all electrical equipment is grounded and the cord is in good condition. If a machine causes a shock or starts smoking, unplug it if possible and report immediately to your supervisor. When not in use, check that coffee pots and any other heat generating electrical appliances are shut off or unplugged. Electrical appliances must be designed and used in accordance with Underwriters Laboratories (UL) requirements.

Electric cords should be examined on a routine basis for fraying and exposed wiring. Particular attention should be paid to connections behind furniture, since files and bookcases may be pushed tightly against electric outlets, severely bending the cord at the plug.

- Extension cords shall only be used in situations where fixed wiring is not feasible.
- Extension cords shall be kept in good repair, free from defects in their insulation. They will not be kinked, knotted, abraded or cut.
- Extension cords shall be placed so they do not present a tripping or slipping hazard.
- Extension cords shall not be placed through doorways having doors that can be closed and thereby damage the cord.

### **E. Housekeeping:**

Good housekeeping is an important element of injury prevention in offices. Poor housekeeping may lead to fires, injuries to personnel, or unhealthful working conditions.

Passageways in offices must be free and clear of obstructions. Proper layout, spacing and arrangement of equipment, furniture and machinery are essential.

All aisles within the office should be clearly defined and kept free of obstructions.

Chairs, files, bookcases and desks must be repaired or replaced if they become damaged. Filing cabinet drawers should always be kept closed when not in use. Heavy files should be placed in the bottom file drawers.

Materials stored within supply rooms must be neatly stacked and readily reached by adequate aisles. Care should be taken to stack materials so they will not topple over. Under no circumstances should materials be stacked within 18 inches of ceiling fire sprinkler heads.

Materials shall not be stored so that they project into aisles or passageways in a manner that could cause persons to trip or could hinder emergency evacuation.

#### **F. Computer Workstations:**

Complaints concerning musculoskeletal problems are frequently heard from computer operators. Most common are complaints relating to the neck, shoulders, and back. Others concern the arms and hands and occasionally the legs.

Certain common characteristics have been identified and associated with increase risk of musculoskeletal problems while using a computer with monitor. These include:

- Design of workstation.
- Nature of task.
- Repetitiveness of the job.
- Degree of postural constraint.
- Work pace, and work/rest schedules.
- Personal attributes of individual workers.

The key to comfort is in maintaining the body in a relaxed, natural position. The ideal work position is to have the arms hanging relaxed from the shoulders. If a keyboard is used, arms should be bent at right angles at the elbow, with the hands held in a straight line with forearms and elbow close to the body. The head should be in line with the body and slightly forward.

#### *Display Screens:*

When work is conducted at a computer, the top of the display screen should be at, or just slightly below, eye level. This position allows the eyes to view the screen at a comfortable level, without having to tilt the head or move the back muscles.

Control glare at the source whenever possible; place the device so that it is parallel to direct sources of light such as windows and overhead lights, and use window treatments if necessary. Keep the screen clean.

#### *Chairs:*

The chair is usually the most important piece of furniture that affects user comfort in the office. The chair should be adjusted for comfort, making sure the back is supported and that the seat pan is at a height so that the thighs are horizontal and feet are flat on the floor. An ergonomically sound chair requires four degrees of freedom – seat pan tilt, backrest angle, seat height and backrest height. Operators can then vary the chair adjustments according to the task. In general, chairs that are easily adjustable permit the most flexibility to support an individual's preferred sitting posture.

Armrests on chairs are recommended for most office work except where they interfere with the task. Intermittently resting arms on armrests is a very effective way to reduce arm discomfort. Armrests should be sufficiently short and low to allow workers to get close enough to their work surfaces.

### *Working Height:*

The work surface height should fit the task. The principle is to place the surface height where the work may be performed in such a manner as to keep arms low and close to the body in relation to the task. If the working height is too high, the shoulders or the upper arms have to be lifted to compensate, which may lead to painful symptoms and cramps at the level of the neck & shoulders. However, if the working height is too low, the back must be excessively bowed, which may cause backache. Generally, work should be done at about elbow height, whether sitting or standing. If you have questions about the correct working height of your workstation please, contact the Office of Risk Management for an evaluation.

### *Work/Rest Schedules:*

One solution for stress and fatigue is to design the computer operator's work so that tasks requiring concentrated work at the computer terminal are alternated with non-computer based tasks throughout the day. If continuous work at the computer is a must then a short break to stand up, stretch or change position should be taken at least once each hour to allow muscles to rest.

### Other Solutions:

Additional measures that will aid in reducing discomfort while using a computer include:

- Use a soft touch on the keyboard and keep your shoulders, hands and finger relaxed.
- Use a document holder positioned at about the same plane & distance as the screen.
- Rest your eyes by occasionally looking off into the distance.

## **G. Office Lighting:**

Different tasks require different levels of lighting. Areas in which intricate work is performed, for example, require greater illumination than warehouses. Lighting needs vary from time to time and person to person as well. One approach is to use adjustable task lighting that can provide needed illumination without increasing general lighting.

Task lamps are very effective to supplement the general office light levels for those who require or prefer additional light. Some task lamps permit several light levels. Since task lamps are controlled by the individual, they can accommodate personal preferences.

## **H. Indoor Air Quality:**

The topic of indoor air quality and pollutant levels within office environments is very complex. The complexity arises from various factors including:

- Office buildings frequently undergo building renovations such as installation of new carpet, modular office partitions and painting. Offgassing from such things as paints, adhesives, sealants, office furniture, carpeting, and vinyl wall coverings is the source of a variety of irritant compounds.
- In most cases, these chemical contaminants can be measured at levels above ambient (normal background) but far below any existing occupational evaluation criteria.
- Many of the health symptoms that appear are vague and common both to the office and home environment.
- In general, very little data on pollutant levels within office environments is available

Guidelines or standards for permissible personal exposure limits to pollutants within office buildings are very limited. If you have concerns about the indoor air quality of your office, contact your supervisor who will contact the Office of Risk Management for an evaluation (see page 10 of this manual for more information).

**I. Chemical Safety:**

All office employees shall participate in maintaining compliance to the Pennsylvania Worker & Community Right to Know Law by attending a training session within their department. Each office employee must be made aware of all hazardous materials they may contact in their work area. A hazard communication program is available through the Office of Risk Management (see page 43 for more information) that includes:

- A written program.
- Material Safety Data Sheets (MSDS) for each hazardous substance used.
- Specific safe handling, use and disposal.
- Employee training.

**J. Medical Emergencies:**

All City employees are to dial 911 if they need urgent medical assistance.

Please direct questions regarding this office safety document to the Office of Risk Management.