Office Workplace Hazards and Controls

With the ever-growing trend toward a service-based economy, the office environment has become the “typical” workplace for millions of American workers. Office exposures, once considered relatively minor, have become major causative factors with regard to overall workplace injuries and illnesses.

Predominant actions resulting in disabling injuries include:

- Falls
- Material Handling/Overexertion
- Struck by falling objects
- Struck against objects
- Caught in or between objects
- Stress

To assist in the elimination/reduction/control of office hazards, the following control measures should be utilized:

- Office layout – Arrange to maintain work flow efficiency and safety.
- Office machines – Relocate away from desk and table edges. Secure machines that tend to “creep.”
- File cabinets – Position and secure against walls and columns.
- Floor surfaces – Provide durable and slip-resistant floor surfaces. Repair all defects (cracks, holes, tears, etc.) immediately. Use high coefficient of friction floor polishes and waxes. Utilize color contrasting to delineate differences in floor height and floor materials.
- Electrical and telephone cables – Run underneath floor surface, position away from aisles, provide nonslip plastic guards, or tape down.
- Aisles – Maintain four feet or wider aisle width. Keep unobstructed at all times. Position file cabinets so drawers do not open into aisles.
- Stairways and exits – Comply with all requirements of the Life Safety Code (NFPA 101). Provide handrails for all stairways. Keep well-marked, adequately illuminated, and unobstructed at all times. Exits should not require use of a key for operation from inside the building.
- Doors – Provide glass doors with conspicuous design/ decal approximately 41/2 feet above the floor. Utilize safety glass rather than plate glass. Install doors so that they do not open directly onto a passageway.
• Illumination – Position work stations so that workers do not face windows, unshielded lamps, other sources of glare. Walls and other surfaces should conserve light, and minimize reflections. Provide minimum illumination (in footcandles) as follows:
  Cartography, Detailed Drafting .......................... 200
  Accounting, Auditing, Bookkeeping ...................... 150
  Regular Office Work ........................................ 100
  Reading, Intermittent Filing ............................ 70
  Conference Rooms, Interviewing, Washrooms .......... 30
  Corridors, Elevators, Escalators, Stairways ............ 20

• Ventilation – Provide fresh air at a minimum rate of 5 cubic feet/minute/person in nonsmoking areas, and 20 cubic feet/minute/person in smoking areas. Keep ventilation fans in operation while building is occupied. Maintain inside temperature between 70 degrees F and 79 degrees F, and humidity between 20% and 60%. Keep carbon dioxide concentration below 1,000 parts per million. Provide preventive maintenance program for all heating, ventilation, and air conditioning (HVAC) systems.

• Electrical – Arrange power cords to eliminate/minimize tripping hazards. Prohibit use of extension cords, multi-plug adapters, non UL-listed electrical appliances and equipment, improperly grounded equipment. Provide surge protection for all data processing and high-value electronic equipment. Utilize only qualified electricians and approved materials for electrical installation and repair work. Comply with all requirements of the National Electrical Code (NFPA 70).

• Materials – Store only in designated storage areas. With shelf storage, store heavier items on lower shelves, lighter items on upper shelves. Minimize flammable liquids storage, and store only in UL-listed safety cans and cabinets. Prohibit smoking in storage areas. Arrange storage areas to eliminate/minimize bending, reaching, stretching, and twisting at waist motions.

• Furniture – Provide ergonomically designed and fully adjustable chairs, desks, tables. Equip desk and file cabinet drawers with safety stops. Replace glass desk and table tops with synthetic surfaces.

• Machinery – Purchase copying machines, paper cutters and shredders, etc., with guarding that meets or exceeds all applicable OSHA requirements. Train workers in safe use of machines.

• Ladders, step stools – Equip with brakes which operate automatically when weight is applied. Equip ladders with nonskid feet. Train workers in safe use of equipment.

• Miscellaneous – Prohibit use of spindle (spike) files. Store pointed objects with the points down. Position knives, scissors, etc., with points away from the user. Relocate glass objects from desk and table edges.

• Fire protection – Store soiled rags, towels, etc., in UL-listed containers with self-closing lids. Limit smoking to designated areas only, or in accordance with local codes and ordinances. Utilize noncombustible containers with lids for trash storage. Remove combustible trash.
from building daily. Provide and maintain appropriate portable fire extinguishers, and train workers in their proper use.

- Emergency planning – Prepare written emergency plan (adverse weather, bomb threat, fire, etc.), and familiarize all workers with it. Post evacuation plan throughout workplace, and hold periodic drills.

- Stress management – Design job requirements, production, scheduling, to eliminate/minimize:
  - Work overload or underload
  - Task ambiguity or rigidity
  - Too much or too little responsibility
  - Too much or too little role conflict
  - Negative competition or no competition
  - Constant change or boring stability
  - Social isolation
  - Lack of upward mobility.

- Safety activity and organization – Develop and implement a Management supported and directed Loss Prevention program which includes the following key components:
  - Issuing Corporate Statement of Loss Prevention and Safety Policy
  - Appointing a Loss Prevention and Safety Coordinator
  - Assigning Supervisory Responsibility with Accountability
  - Assigning Employee Responsibility
  - Hazard Identification, Evaluation, and Control
  - Employee Selection and Placement Job Training and Motivation
  - Planned Self-Inspections
  - Accident Investigations, Analysis, and Action to Prevent Recurrence
  - Record keeping