OFFICE SAFETY AND ERGONOMICS

A. Introduction:

- 1. This chapter discusses potential hazards encountered in normal office environments and the precautions to be taken to avoid them. All injuries should be reported to a supervisor immediately following the occurrence.
- B. Responsibilities:
 - 1. Environmental, Health and Safety Department a. Provide adequate training and awareness of ergonomics and office safety.

b. Provide suggestions to managers, supervisors and department heads on administrative and engineering controls related to office safety

c. Provide evaluations of employee work stations when employee exhibits symptoms or pain related to their daily work activities.

2. Managers, Supervisors, Department Heads

a. Address any employee complaints of pain associated with the configuration of their workstation or the equipment provided that may not suit the employee.

b. Provide other options if an employee complains of symptoms of injuries.

- c. Work with EHS to ensure employee is not exposed to any ergonomic injuries.
- d. Ensure employees attend required training sessions.
- 3. Employee

a. Report any problems with workstation setup or an injuries associated with workstation setup.

- b. Attend required training sessions as necessary.
- c. Attempt to follow recommended ergonomic guidelines to reduce workplace injuries.

C. Policies, Practices, and Procedures:

- 1. No materials (supplies, chemicals, books, paper, bottles, boxes, equipment, tools, or other items) will be stored on top of cabinets, file banks, book cases, or other places in such a way that they may be dislodged and fall.
- 2. Only one file cabinet drawer should be opened at a time to avoid the possibility of overturning the cabinet. Do not leave any file cabinet drawers opened when not in use, to prevent a tripping hazard.

- 3. Cords will be kept out of the aisles and walkways to prevent tripping hazards.
- 4. Avoid leaning to the limit in spring-loaded swivel chairs.
- 5. New furniture will be checked for sharp edges, burrs, or damaged places that may cause cuts or snags.
- 6. File and desk drawers, as well as bookcase and cabinet doors will be closed when not in use.
- 7. Paper cutters will be provided with proper guards.
- 8. A proper step-stool or roll-away platform ladder will be used when it is necessary to reach excessive heights. *Chairs or other office furniture will not be used in place of this equipment.*
- 9. Coffee pots and hot plates will be placed where they will not be upset, dislodged, or inadvertently contacted and will be turned off at the end of each day.
- 10. Razor blades, knives, scalpels, scissors, pipettes, or other sharp instruments will be stored carefully to avoid cuts. Razor blades will be used only in proper holders.
- 11. Any malfunction of equipment, mechanical or electrical, will be reported to supervisors for proper repair or replacement,
- 12. Use of personal electrical appliances (desk lights, fans, heaters, extension cords, etc.) will be approved by Facilities Management. Personal electrical appliances and extension cords will meet the following criteria as a minimum:
 - a. UL listed and grounded.
 - b. Damaged devices and cords must be repaired by a qualified person.
 - c. Plugs having a loose insulating disk covering the screw terminals are not permitted.
- 13. Carrying objects of excessive weight will be avoided.
- 14. Materials will not be carried in such a manner as to block the carrier's view of the walkway or possible obstructions.
- 15. When selecting chemicals or hazardous materials, the requirements of Chapter 6 (Hazard Communication) will apply.

D. Ergonomics: Per OSHA, "Ergonomics is the science of fitting workplace conditions and job demands to the capabilities of the working population." There are many ways to keep our bodies healthy and safe around the office.

- 1. Ergonomic Risk Factors:
 - a. Repetitive, forceful, or prolonged exertions of the hands (typing included).
 - b. Frequent or heavy lifting
 - c. Pushing, pulling, or carrying of heavy objects;

d. Prolonged awkward postures (including sitting at your desk). (Vibration and cold may add risk to these work conditions)

2. Workstations

a. <u>Work Area</u>: When setting up a work area, make sure that the space is large enough for you to spread out comfortably and allows for a full range of motion, which can be a special concern for those with especially long limbs. You should also leave plenty of room to arrange the items you use most frequently in such a way that there is no strain for you to reach them.

b. <u>Laptops</u>: When using a laptop, it's best to use it while it's on a table rather than on your lap. If you use it frequently, you might be better served by using a separate keyboard and mouse rather than using the built-in keyboard and touch pad to reduce strain on your wrists and hands.

c. <u>Keyboard</u>: If you spend a lot of your workday typing, where you place your keyboard and how you use it can greatly affect your risk for getting RSIs (repetitive stress injuries) like carpal tunnel syndrome. Your keyboard should be placed so that your arms are parallel to your thighs. If your desk doesn't allow for this, try getting a keyboard tray. You'll also want to do your best to use good typing techniques, keeping your wrists elevated and not hitting the keys too hard.

d. <u>Mouse</u>: When setting up your desk, make sure to keep your mouse easily within reach and try not to grip it too tightly, as doing so can strain the muscles in your hand. If you find that using a mouse bothers you too much, try using an alternate input device like a trackball or a touch pad.

e. <u>Desk</u>: There is no one-size-fits-all desk, so choose one that is right for you. You can help reduce your chance of injury by getting a document holder, arranging your electronics within your reach and making sure that the area underneath your desk remains uncluttered.

f. <u>Chair</u>: A good chair can do wonders, as sitting is much harder on your back than it might appear to be. Make sure to keep your lower back supported, and adjust your chair so that you can easily reach your keyboard and mouse. If this means raising the chair so that your feet don't quite reach the floor, get a footrest to help keep your feet from dangling.

g. <u>Monitor</u>: Improperly configured monitors can cause a great deal of eyestrain, resulting in headaches and difficulty concentrating. Center your monitor in front of you at a comfortable distance, and adjust the brightness settings so that it's easy on your eyes. Make sure to take breaks from staring at your screen, too. Glare can be a problem as well, and if you can't seem to eliminate it, use a glass glare filter.

h. <u>Work Habits</u>: You can arrange your work habits so that you don't put undue stress on any part of your body. Make sure to take frequent breaks, get up and walk around, and change positions frequently so that repetitive tasks and static work won't take their tolls.

i. <u>Phone</u>: It can be tempting to multitask and cradle your phone receiver between your neck and shoulder. However, this should be avoided, as it can create a great deal of strain in your neck muscles. If you need to have your hands free, try using a headset or put the call on speakerphone.

j. Working with the body in a neutral position reduces stress and strain on the muscles, tendons, and skeletal system and reduces your risk of developing a musculoskeletal disorder (MSD). The following are important considerations when attempting to maintain neutral body postures while working at the computer workstation:



i. Hands, wrists, and forearms are straight, in-line and roughly parallel to the floor.

ii. Head is level or bent slightly forward, forward facing, and balanced. Generally it is in-line with the torso.

iii. Shoulders are relaxed and upper arms hang normally at the side of the body.

iv. Elbows stay in close to the body and are bent between 90 and 120 degrees.

v. Feet are fully supported by the floor or a footrest may be used if the desk height is not adjustable.

vi. Back is fully supported with appropriate lumbar support when sitting vertical or leaning back slightly.

vii. Thighs and hips are supported by a well-padded seat and generally parallel to the floor.

viii. Knees are about the same height as the hips with the feet slightly forward.

k. Regardless of how good your working posture is, working in the same posture or sitting still for prolonged periods is not healthy. You should change your working position frequently throughout the day in the following ways:

i. Make small adjustments to your chair or backrest.

ii.	Stretch	your	fingers,	hands,	arms,	and	torso.
-----	---------	------	----------	--------	-------	-----	--------

iii. Stand up and walk around for a few minutes periodically.

3. Lighting

Bright lights shining on the display screen "wash out" images, making it difficult to clearly see your work. Straining to view objects on the screen can lead to eye fatigue. If lighting on your computer screen creates glare, you should request a screen protector designed to reduce glare from your Supervisor for your computer. If there is not enough lighting in your area, you may want to consider a desk light for reading.

4. Musculoskeletal Disorders:

Work performed at a computer may require sitting still for considerable time and usually involves small frequent movements of the eyes, head, arms, and fingers. Retaining a fixed posture over long periods of time causes muscle fatigue and, if this practice is consistent, can eventually lead to muscle pain and injury.

People who work on computers are also are subject to a potential risk of developing various musculoskeletal disorders such as carpal tunnel syndrome, and tendonitis. Musculoskeletal disorders are injuries to the muscles, joints, tendons, or nerves that are caused or made worse by work related risk factors. Early symptoms of musculoskeletal disorders include pain and swelling, numbness and tingling (hands falling asleep), loss of strength, and reduced range of motion.

If workers have any of these symptoms, they should report them to their employers as soon as possible. If these symptoms are not treated early, they can result in loss of strength in affected area, chronic pain, or permanent disability.

It is important to take frequent breaks from sitting at the computer, perform stretching exercises regularly and make sure your workstation is setup in a way that is conducive to preventing injuries.



- E. Training:
 - 1. All new hires will be required to review the contents of this chapter.
 - a. New hires will complete the Ergonomics module online as part of their initial training.

b. Employees will take the Ergonomics module as part of their annual training requirements online.