

Keys to Success

OFFICE
ERGONOMICS

Ergonomics is the study of the type of work done in a particular environment and the tools that are used to complete the work. The goal of office ergonomics is to set up the space the individual works in to fit the work being done.

When an injury occurs in the workspace it is often described as a musculoskeletal disorder or MSD. According to the United States Department of Labor, work related musculoskeletal injuries are one of the leading causes of injury and illness. The Bureau of Labor Statistics reported that MSD cases accounted for 33% of all of the worker injury and illness cases in 2011. By combining proper design and appropriate work habits, it is possible to greatly reduce the risk of injury.

- Adjust the seat height of the chair so that the individual's feet are flat on the floor. General seat height ranging from 16- 21 inches is appropriate for most workers. Knees should be at a 90 degree angle or slightly greater; a foot rest should be utilized if needed. There should be at least 2" between the back of the knees and the front edge of the chair pan. If necessary, tilt the seat pan slightly forward.
- The chair backrest should be positioned so that it fits the natural curve of the spine, and should provide firm cushioning and support to the lower back. An ideal office chair is typically between 12 and 19 inches wide.
- Armrests should be adjusted so that the weight of the individual's arms are supported by the armrests, not the shoulders. They should not interfere with the movement of the arms and should still allow close movement to the keyboard.
- The keyboard should be positioned so that the home row of keys is at or just below seated elbow height when the shoulders are relaxed and the elbows are close to the body. Upper arms should be parallel to the spine and elbows should be positioned at a 90 degree or slightly greater angle. Wrists and hands should remain straight and in-line with the forearm.
- Hands should float over the keyboard and wrists should not rest while keying.
- The mouse should be placed next to the keyboard, at the same level. The use of a mouse can be difficult on the hands so, when possible, keyboard shortcuts should be utilized.
- The monitor should be placed directly in front of the individual so that the top line of the screen is at or just below seated eye level. The head should remain in an upright position when viewing the screen.
- The monitor should be distanced at approximately arm's length from the eyes and adjusted for comfortable viewing without having to lean forward or backward.
- Lighting should be adjusted to reduce glare. Drapes/blinds should be closed and overhead lighting should be reduced when possible. Indirect or shielded lighting should be utilized.
- A document holder, if used, should be at about the same height and distance as the monitor screen to reduce head and neck movement.
- Any frequently used desk top items, such as a telephone and calculator, should be within close proximity to reduce leaning and reaching.
- Computer tasks should be varied with other work activities or small breaks should be taken to allow the muscles to relax and recover.

