OFFICE ERGONOMICS – Workstation Adjustment



A properly adjusted workstation is one that is *adjusted and set up to promote neutral body postures for a specific individual user.* For a seated person, a properly adjusted workstation will be one that results in the following neutral body postures:

- Feet: Flat on the floor
- <u>Upper Legs/Thighs</u>: Roughly parallel to the floor
- Knees: Roughly 90° angle and about an inch of space between the back of the knee and the front edge of the seat pan
- Hips: Roughly 90° angle with the lower back pressed comfortably against the chair back rest or lumbar support
- Wrists: Hand in the same plane as the forearm (neither flexed or extended)
- Elbows: Roughly 90° angle
- Upper Arms: Hanging straight down from the shoulder
- Head: Ears roughly in line with shoulders, tilted neither forward or backward

Workstation Adjustment

Workstations should be set up and adjusted to heights and positions that result in the neutral body postures noted above. One size does not fit all, rather one size fits one person...the person for whom those adjustments will best promote neutral body postures for that person.

Office furniture and equipment varies significantly with respect to adjustability. Generally speaking, the desk or work surface height is fixed or the least adjustable, so making adjustments to the chair, keyboard/keyboard tray, and monitor are usually the quickest fixes. If neutral postures cannot be achieved with the existing work surface height, the work surface will need to be relocated.

Following are some general guidelines for adjusting chairs, keyboards/keyboard trays, and monitors.

Chair

- Adjust seat pan height so that feet are flat on the floor and thighs are parallel to the floor.
- Adjust the seat pan depth (if possible) so that roughly 1" of space is present behind the knees.
- Adjust the lumbar support so that it supports the lower back. You may feel like the support is pushing your stomach out toward the keyboard.
- Arm rests, if provided, should be adjusted to elbow height when the arms are hanging relaxed from the shoulder.
- Seat pan should be flat or tilted slightly forward.
- Back rest should be straight upright or tilted slightly back.
- Seat pan should provide adequate cushioning so that weight is evenly distributed over the entire pan surface.
- Seat pan width should allow comfort for the user.

Monitor

- Adjust height so that top of monitor is at or slightly below eye level.
- For bi-focal wearers, monitor height should be lowered slightly to prevent having to tilt the head back to view the screen.
- Monitor should be placed directly in front of user, centered on the user, and at least an arm's length away from the user.
- Adjust monitor contrast high and brightness low. Make adjustments throughout the day based on changing external lighting conditions.
- Prevent glare by positioning monitors at a 90° angle to exterior windows, and changing the angle or tilt of the monitor to reduce glare from overhead lighting.
- Utilize an anti-glare screen if necessary.
- For dual monitor workstations: position the monitored most frequently used directly in front of the user. If both are used equally, or close to equally, position them equally on each side of the user's centerline.

Keyboard/Keyboard Tray/Mouse

- Keyboard height should be adjusted so that the home row of the keyboard (asdfjkl;) is at roughly elbow height.
- Wrists should remain in neutral (tilted neither up nor down) during use.
- Keyboard can be tilted slightly downward so long as neutral wrist posture is maintained.
- Mouse or input device should be placed directly adjacent to the keyboard and at the same height as the keyboard.
- Keyboard should be placed directly in front of the operator and at a distance that allows the upper arms to hang straight down from the shoulders. Avoid reaching out, away from the body to use the keyboard.

Other Considerations

- Feet should always be firmly supported. A foot rest is typically only needed when the chair height must be raised to a point where the feet are not in solid contact with the floor.
- Consider a copy holder when working from hard copy. Place it as close to the same distance and height as possible to the monitor.
- Vary your work routine to allow for periodically standing up from the work station and walking around.
- Take short breaks to stretch muscles in the forearms, shoulders, back, neck, and legs.
- For frequent phone use, move the phone close to the operator and use a hand-free head set or speaker phone to eliminate cradling the received between the shoulder and ear.

RISK CONTROL TOPICS: Office Ergonomics – Workstation Adjustment



