

TOOLBOX TALK



Computer Ergonomics

Issue #8 October 2015

INTRODUCTION

Spending hours seated in front of a computer is a common part of the work day for many people. This can lead to physical discomfort. It is important to take occasional short ("mini" or "micro") breaks for both physical and physiological rest to help prevent discomfort or possible injury.

Common strains and discomfort associated with computer work are:

- Dry, sore eyes from looking at the computer screen;
- Hand and wrist soreness, swelling, numbness;
- Discomfort or tingling in your shoulders, back, arms, neck, legs, or feet.



Avoiding Physical Stress

The best ways to avoid injury and pain is to ensure your workstation fits your body. Assess what components of your workstation can be adjusted, and do so if necessary. If you need assistance, maybe a co-worker can help. Keep frequently used items within arm's reach so as to not necessitate repeated over stretching, ensure that your chair is comfortable and adjustable, and evaluate and adjust your computer station set-up. Additional tips include:

- Keep elbows close to your body, and forearms parallel to the floor or tilted slightly downward to prevent nerve compression at your elbow;
- Use a chair that has good back support and sit close to the keyboard to prevent over-reaching;
- Feet flat on the floor, or on a footrest if available;
- Face forward, head and neck straight;
- Keep your wrists and forearms in line, not angled up or down or turned in or out, type with straight wrists;
- If you require eyewear (usually reading glasses), use a type that does not require you to tilt your head back to read the keyboard or to view the display (this often means avoiding bifocals or trifocals);
- Minimize glare by closing curtains or use a glare filter.

Computer Workstation Arrangement

Monitor Configuration:

- Depth- The monitor should be approximately an arm's length away from you while seated.
- Height- The toolbar at the top of the screen should fall just below eye level; this allows the user to view the screen without causing neck strain from repetitive moving.







Keyboard and Mouse Configuration:

- Keyboard- The keyboard should be at a height so your forearms are parallel to the floor and make a 90° to 110° angle with the upper arm. This should allow you to freely type without resting your wrists on ANY hard or soft surface.
- Wrist rests for resting the wrists during <u>non</u>-typing / keying operations
- Mouse- The mouse should be located on the same plane as the keyboard

Chair Configuration:

Height- The chair should be at a height that allows you to place your feet flat on the floor with your thighs
perpendicular to your lower legs.

Work Breaks and Stretching

There are several types of short breaks that can help reduce the physical discomfort associated with sitting at a computer for long periods.

- Eye breaks: Look away from your computer screen every 15 minutes or so and focus on something at a distance for a short time (~30 seconds);
- Rest break: every 30-60 minutes take a quick break, standup, stretch, or walk around;
- Hand stretches: alternate clenching a fist and spreading your fingers, hold each for a few seconds and then allow your hands to relax;
- Wrist and forearm stretches: make small gentle circles with your wrists, lace fingers and, with elbows out, straighten your arms for a gentle stretch;
- Shoulder stretches: raise your shoulders to your ears, then release, draw shoulder blades together, and then release. Hold each for a few seconds:
- Neck stretches: Gently turn head from side to side, look up and down;

Back stretches: While seated, use your hands on your knees to help gently stretch your chest toward your knees; standing, place hands on the small of the back to protect the area and slowly bend backwards for a gentle stretch.





