

home office ergonomics pitfalls and solutions

ergonomics overview

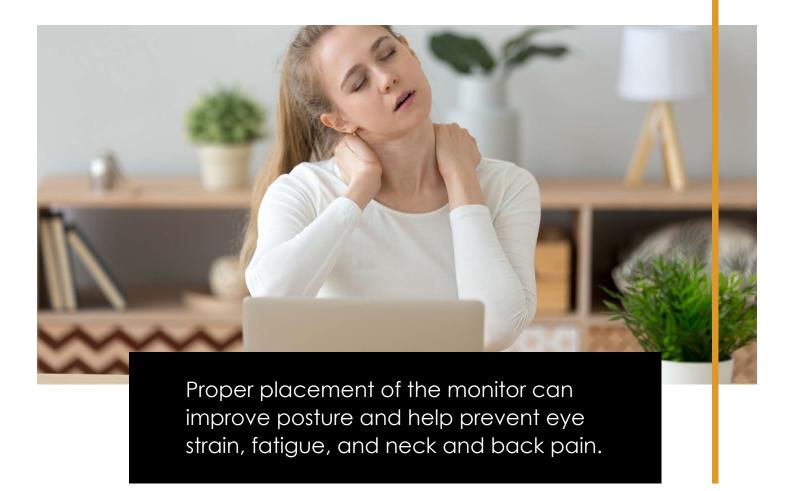
Given the current pandemic, a lot of employees that were previously working in a properly set-up ergonomic environment are now finding themselves working from home. Some home workstations were put together quickly and do not provide the same level of support and protection that employees experienced at their office workstation. A poor ergonomic setup can often lead to musculoskeletal disorders and/or decreased productivity.

Our team of over 50 Occupational Therapists/Kinesiologists share some educational tips to assist you with your home set-up so that injuries can be avoided and minor adjustments can be made to your home office.

- 01 monitor
- 02 mouse
- 03 chair
- 04 keyboard
- 05 laptop
- 06 stretching



01 - monitor



- Your monitor height should be at or slightly below eye level. Employees that wear corrective lenses for reading or close work (e.g., bi-focals, tri-focals, and progressive lenses) may find lowering the screen 1-2 inches more comfortable. Consider using an external monitor rather than a laptop as laptops can cause poor postures and lead to injury.
- If your monitor is not height adjustable, put a stack or two of paper or a textbook under the monitor to raise it up until a monitor riser can be obtained.
- Distance of your monitor should be approximately an arm's length from your body, anywhere from 15-30 inches away.
- If possible, set up your monitor perpendicular to a window to avoid glare on the screen. If your office is bright, tilt the monitor slightly down to reduce reflections and glare.
- Place the monitor directly in front of you.
- Take breaks from looking at your computer screen to give your eyes a well needed rest. If possible, alternate between computer and non-computer duties throughout the day.



02 - <u>mouse</u>

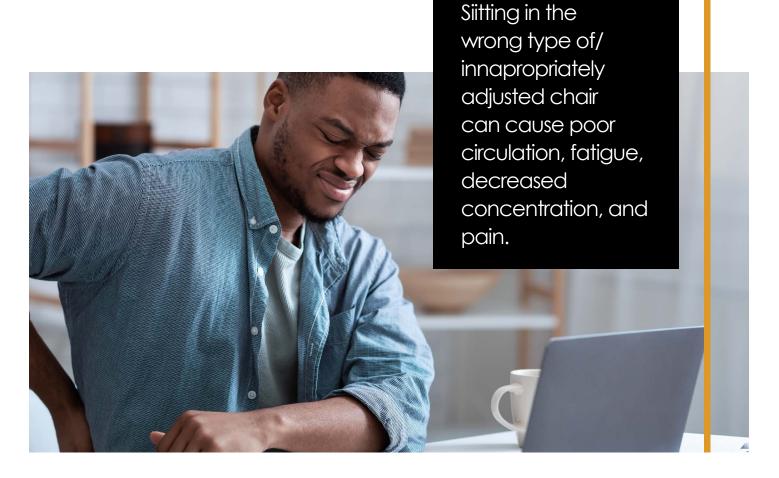
Repetitive movements of the small muscles of the hand can cause them to be overused. Tired and overworked muscles can lead to discomfort, burning, tingling, numbness, pain, and Musculoskeletal Disorders of the hand, wrist, and forearm.



- Mouse height should be level with your elbow and forearm. There should be a 90-degree angle at the elbow with no reaching forward to the mouse. Keep your mouse as close to keyboard as possible.
- Elbows should be close to body.
- Wrists should be straight.
- Use the right size mouse. Mouse should comfortably fit in the palm of your hand without reaching or crunching up the hand/fingers.
- There are several different types of mousing solutions. For example, Vertical Mice allows individuals to keep their hand in a more neutral posture while moving the mouse from the shoulder. Trackballs utilizes larger muscle groups and a Rollerbar mouse requires less reaching if you have shoulder issues.



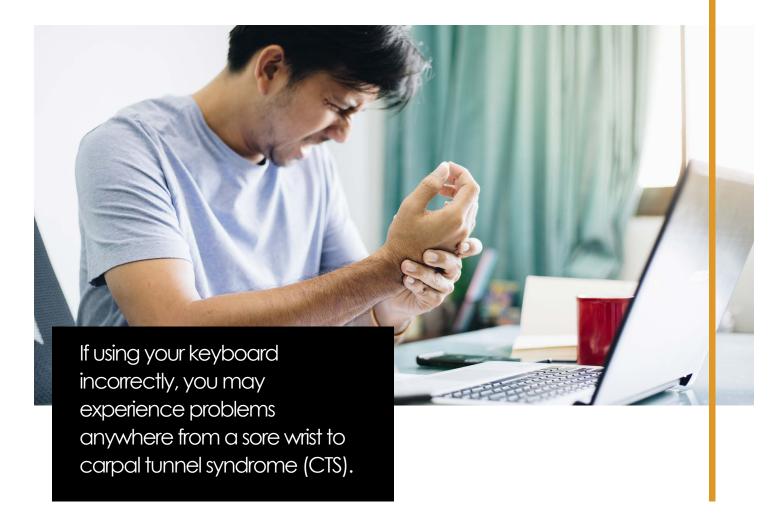
03 - <u>chair</u>



- Raise your chair height so your elbows and forearms are at the same height as the keyboard. You may need to place a footrest on the ground.
- Adjust the height of your backrest so the lumbar support is in the curve of your low back. If there is no lumbar support or the backrest height is not adjustable you could consider using a cushion to raise the seat and a soft towel as a lumbar support.
- Adjust the seat pan depth so you can fit two fingers behind your knees.
- Adjust chair back tilt to a comfortable position. Optimum angle is usually between 90-110 degrees at the hip.
- Armrests should be adjusted to elbow height to allow you to rest your forearms. Swivel armrests inward if possible.
- Adjust the height of the chair so feet are flat on the floor (90-120 degrees at the knee).



04 - keyboard



- Keyboard height should be level with your elbows and forearm. 90-degree angle at the elbow with no reaching forward to the keyboard. If reaching is required, consider an external keyboard.
- Keyboard tray should be positioned flat or with a slight negative tilt-down away from the body. This reduces wrist extension and has been shown to decrease pressure on the carpal tunnel.
- Wrists should be straight. Elbows close to the body.
- Centre your body in front of the keyboard.
- Do not use wrist or palm rests.
- Do not rest your arms on chair armrests while keyboarding.
- Do not sit in the same position for long periods. Take short, regular breaks. This can help prevent repetitive strain injury and other upper limb disorders.



05 - laptop

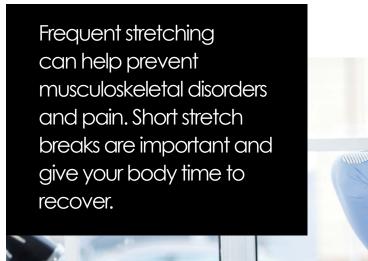
When transitioning to a home office environment, several employees are using laptops at their kitchen table, office, or even couch. This can lead to several problems including neck, shoulder, wrist, and even vision problems.



- Posture Keep your back straight with shoulder blades pulled back and feet flat on the floor. The neck should be aligned with the spine not bent or protracted forward. Don't slouch!
- Position your laptop screen at the right height (top of the monitor should be at eye level). Solutions include raising your laptop by putting a stack of paper or monitor riser underneath the laptop and using an external keyboard. Or alternatively obtaining an external monitor and using your laptop keyboard.
- Laptop keyboard should be positioned at elbow height. Typically, a keyboard is too high (on top of a desk or countertop) which can lead to extension of the wrist and reaching. Consider raising your chair and using an external monitor or keyboard. A footstool may be required to maintain feet flat on the floor or lower your keyboard to elbow height by using an adjustable keyboard tray.
- Do not sit in the same position for long periods. Take short, regular breaks and stretch often.



06 - stretching



It is suggested that you stretch at least one time per hour. Even standing up and getting a glass of water is better than not taking a break at all.

<u>CLICK HERE</u> for an at-home stretching routine that you can complete 1-2 times every hour to reduce any discomfort and prevent your muscles from getting stiff.

If you are experiencing further difficulties or require more personalized services, we can assist you.

Please contact Lisa Yassein at 1-800-361-4642 x2520 for information about our ergonomic consultations and assessments.

