Laptop Ergonomics

Are you using your laptop unsafely?

Laptop computers are lightweight, portable and convenient, allowing us to keep in touch with the home, office and school from almost anywhere. Unfortunately, the laptop's compact design, with attached screen and keyboard, forces laptop users into awkward postures. When the screen is at the right height, the keyboard position is too high; and when the keyboard is at the right height, the screen is too low.

Laptops pose less risk when used for short periods of time, but nowadays, many people use laptops as their main computer. This creates an ongoing tradeoff between poor neck/head posture and poor hand/wrist posture.

A comfortable workstation setup promotes neutral postures with the neck aligned with the spine (neutral - not bent or thrust forward), back relaxed but supported, shoulders relaxed (not hunched or rounded), elbows close to the body and bent at an angle between 90 and 120 degrees, and wrists and hands straight (not bent or turned). If you use a laptop frequently, optimize your home or office laptop workstation to promote such an ergonomic posture.

Setting up your laptop for frequent use

- Maintain a neutral neck posture by placing the top of the screen at about eye level or slightly lower if using bifocal glasses.
- Use a laptop stand or place your laptop on a stable support surface, such as monitor risers, reams of paper, or phone books so that the screen height can be adjusted.
- Attach a regular size, external keyboard and pointing device to the laptop, and place them on an adjustable keyboard tray or desk. The keyboard and mouse should be positioned at or slightly below elbow height.
- Use a docking station whenever possible to more closely resemble a standard desktop workstation where input devices can be attached.
- Take frequent stretch breaks every 30 to 45 minutes.

✔ Here the user is using the laptop monitor. The monitor has been raised using reams of paper. An external keyboard and mouse have been attached and are at a height that allows the user to type with the shoulders relaxed, elbows at sides and forearms parallel to the floor.

✔ Here the user is using a docking station and has attached an external keyboard, mouse and monitor to the laptop. An articulating keyboard tray is used to adjust the typing height.
Setting up your Laptop for Occasional Use
If you usually use a desktop computer, but occasionally use a laptop, here are some quick fixes for short-term laptop use.

- Use a chair that supports a comfortable upright or slightly reclined posture.
- Position your laptop in your lap for the most neutral wrist posture that you can achieve. An empty 2-3 inch binder with the wider edge toward you knees will create an angle that will help keep your wrists straight and maximize the height of the screen.
- In a reclined position, prop your feet up to maintain a neutral trunk/thigh angle.
- Be sure to maintain a neutral neck posture.
- Don’t place your laptop on top of a pillow or other soft material. The lack of circulation could shut down the fan, which can overheat the computer.
- Stand up and stretch frequently.

Your Home Computer Workstation
While most employees are usually focused on the computer workstation at work, consideration also needs to be taken for our computer workstation at home. After the work day is done, many people go home and use the computer for an additional 2-4 hours per night. Your body does know the difference between computer work at home or work; all it knows is that it is being stressed. Follow the basic ergonomic principles for workstation design to ensure a good ergonomic set-up at home to help reduce injuries.

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