

## Laptop Ergonomic Tips

Laptop computers were designed with portability in mind. Some of the design features which improve computing portability create new ergonomic issues or may make old issues more pronounced. Use these tips to reduce the potential for discomfort or injury. Please take a moment to review all of the listed tips. Note: In this document, the term used for a mouse or a similar device is "pointer."

### General computer ergonomics tips:

- Raise the computer screen so the top is just below your eye level - or to a level that is comfortable for you.
- If possible, push the display screen back on the work surface so the viewing distance is at least 18 inches and up to 30 inches, depending on your vision and eyewear status.
- Keep wrists straight. When keying/pointing, your elbow, wrist and knuckles should be in a straight line. To achieve this, you may need to adjust the keyboard or pointer height and/or angle. As a starting point, adjust your seated height (or the work surface, where possible) so your work surface is level with or slightly below your seated elbow height. Note: If you rest your arms on chair armrests while keying/pointing, the armrest height is your seated elbow height.
- Use a footrest or other support if your feet are dangling above the floor or if you feel excessive pressure on your thighs near the front of the chair.
- Keep your hands away from the keyboard and pointer when possible, for example, when waiting for programs to load or when reading from the screen.
- When actively keying, move your hands freely across the keyboard without resting your wrists. Rest wrists/arms when not actively keying/pointing. Take care not to bend your wrists while "resting" them. Cupping the hand may prove beneficial.
- Consider your options for resting arms/wrists. These may include, but are not limited to, using chair armrests, your lap, or crossing your arms across your chest.
- Limit time spent in awkward postures (excessive neck bending, slouched back or shoulders, leaning forward, crossed legs, etc.).
- Change your seated posture throughout the day (e.g., recline when practical to do so).
- Consider standing when practical to do so (for example, when using the telephone).
- Consider using a mirror to keep an eye on your back/neck/wrist posture.
- Take frequent (i.e., every 5-10 minutes) micro-breaks (i.e., 10-60 seconds).
- Check for screen glare (best accomplished with the screen dark/off).
- Adjust screen brightness and contrast.
- Look for ways to reduce computer use, for example, use your phone rather than e-mail when practical to do so.
- Use shortcut keys to reduce pointer use. To find a listing of shortcut keys, click on the Help button within the application you are using (e.g., Microsoft Word) and try searching using keywords "shortcut keys."

### General laptop tips:

- Use an external mouse and keyboard when possible.
- Pillows and other soft materials may block the fan grille, potentially damaging the laptop.
- For frequent transportation, consider using a wheeled case or a backpack (use both backpack straps).
- As appropriate/practical, use the same ergonomic principles and equipment that have proved comfortable for you in a traditional desktop computer office setting.

### Laptop tips when a work surface/table, chair and external keyboard/mouse are available:

- Use a stack of books, monitor stand, docking station, etc., to adjust screen height.
- Adjust the screen so that it is perpendicular to your line-of-sight.

- As appropriate and to the extent possible, use the general ergonomic tips listed in this document.

Tips when external keyboard and mouse are not available:

- You will most likely need to make a trade off between neck/head posture and hand/wrist posture. Personal habits/history and the specifics of the work environment will dictate the posture to favor (in other words, the height of the laptop to maintain).
- To favor wrist posture, adjust laptop height and angle to keep wrists straight.
- As appropriate and to the extent possible, use the general ergonomic tips listed in this document.