

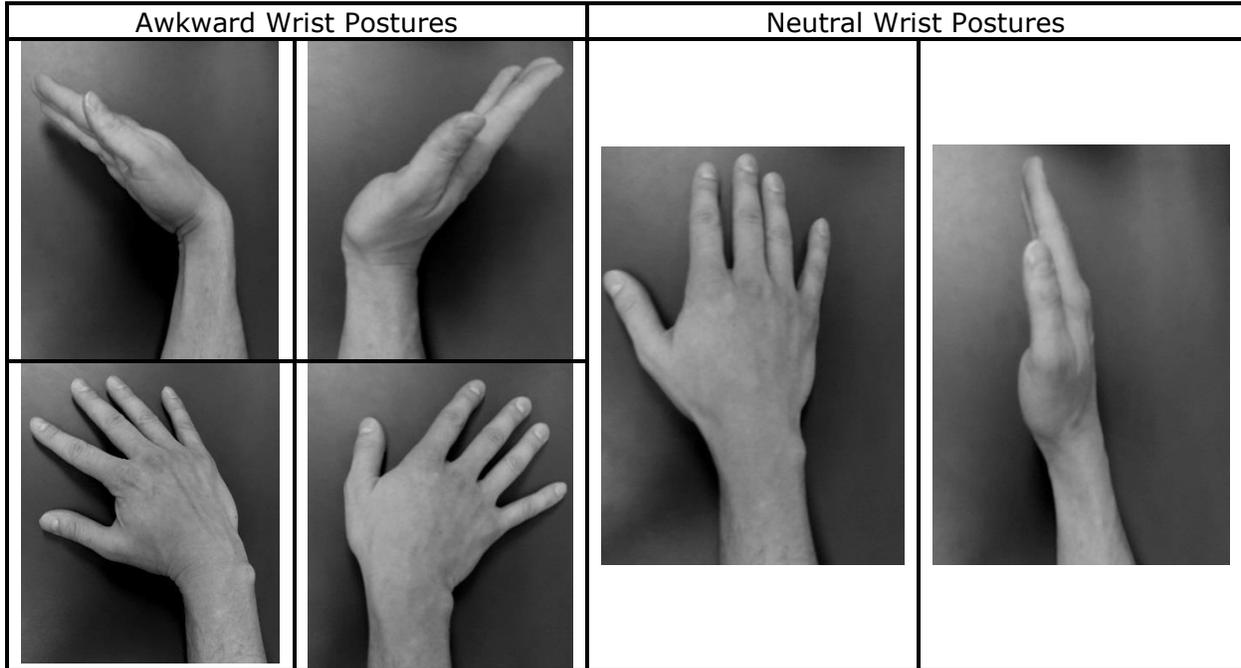
Keyboard, Mice, Keyboard Trays

POSTURE

The duration both a keyboard and mouse are used is increasing. If awkward postures at the hands, wrists and forearms are present, the risk for injury increases. Although it may seem somewhat minor, minor variations in wrist posture can have a large impact on your body and lead to musculoskeletal injuries. Getting into a neutral posture is important in preventing awkward postures and injury.



When typing on a keyboard or using a mouse, relax the upper back, neck and shoulders and let the upper arms hang naturally next to your body with your elbows close to the body in $\sim 90\text{-}100^\circ$ angles with the wrists straight. The keyboard and mouse should be $\sim 1\text{-}2$ inches above your lap with your forearms parallel to the ground.



KEYBOARDS

When typing on a keyboard, the wrists should be relaxed and straight without bending of any kind, up, down, left or right. The keyboard design can contribute to awkward wrist posture of the forearm and wrist and alternatives with appropriate ergonomic design can be useful in reducing or eliminating awkward postures that can increase the risk of injury. Ergonomic keyboard designs varies widely as will personal preference. Consider trying equipment in the ergo lab prior to purchase. Keyboards in the ergo lab have been evaluated for effectiveness and are available for trial. Along with the keyboard itself, the desk height or keyboard tray height and location of the keyboard on the work surface can also affect posture. Focus on setting up your work surface correctly, adjusting the height of your keyboard and mouse and maintain a neutral and straight posture of the wrists, forearms and elbows.



MOUSE

Just like when using a keyboard, the wrists should be relaxed and straight without awkward postures. Alternative mice can be effective in minimizing awkward postures at the wrist and forearm. Avoid over grasping the mouse and squeezing with the fingers. Adjust the pointer speed on the control panel to increase the speed of the pointer/arrow on the monitor and minimize the movements of the hand and wrist. The placement of the mouse on the work surface is also important. The mouse should be at the same height and orientation as the keyboard and without causing a reach.



KEYBOARD TRAYS

If the desktop used is fixed in height and does not have quick and easy adjustability, the desk is too high for likely ~95% of the population. Fixed desktops are designed to fit all users underneath and allow for leg clearance. Although this works to fit everyone underneath, the height for working on a computer is too high for ~95% of the population which forces the keyboard and mouse far too high and can create awkward shoulder and elbow postures.



Keyboard trays provide users the quick and easy adjustment of the height and angle of the keyboard and mouse to allow for neutral typing postures and an elbow angle of ~90-110°.