Keyboard and Pointing Device Tips

General Rule

When using a keyboard and mouse, the upper arms should be relaxed and by your side, your elbows bent at a right angle (90 degrees) and your wrists straight. To find your own elbow height you should put your hands on your lap and then slightly raise them so your hands are parallel to the ground.

![Neutral Wrist Posture](image1)

Neutral Wrist Posture

![Awkward Wrist Posture](image2)

Awkward Wrist Posture

Keyboards

Alternative keyboards are designed to allow the hands to be in a more neutral posture to reduce repetitive strain. The effectiveness of ergonomic keyboards depends on the user and the type of work being performed. Early work has shown that these keyboards to promote neutral wrist and hand posture, but available research does not provide conclusive evidence that alternative keyboards reduce the risk of discomfort or injury. Since purchasing a keyboard is a matter of preference, you should ensure a trial period of at least a month.

Your keyboard should lie flat or negatively inclines (tilted slightly away from you), not propped up on keyboard legs. If a tilting keyboard tray is used, the end of the keyboard closest to you should be on the same plane as your forearms.

![Neutral Posture](image3)

Neutral Posture

![Negative Angle Posture](image4)

Negative Angle Posture

![Positive Angle Posture](image5)

Positive Angle Posture
Mouse

The mouse is an important tool for any computer task. The mouse should fit your hand so that there is an appropriate size where you hands are not either pinching or spreading your fingers too far apart to use the mouse. Pinching can lead to discomfort developing in the fingers and wrist area. While over-gripping can lead to discomfort in the wrist and elbows. You can easily check the size of your mouse by putting it in your hand and seeing if you can see too much or too little of your palm.

Mouse too large (Over-gripping)  Mouse too small (Pinching)  Mouse fits (Relaxed hand)

The mouse should be at the same level as the keyboard and easy to reach. You may want to switch the side of the keyboard on which your mouse is located (by changing hands, you are using different muscles, thereby reducing the risk of injury). It also relieves those who are right-hand dominant, since most tasks are already performed with the right hand. Changing hands can take time and patience, so a gradual change is recommended. The buttons on the mouse can be changed in the Windows Control Panel to accommodate the use of a left-handed mouse.
**Wrist Rests**

Wrist rests are designed to raise the palm to keep the wrists in a neutral position. They are not meant to be used positioned under the wrists; this will cause pressure on the underside of the wrists (which will compress the tissues and blood vessels, resulting in decreased blood & flow). They may also compress the carpal tunnel, that can lead to long-term injury as well as short-term numbness and tingling.

![Wrist Rest Diagram](image)

Palm supports are not to be used while typing, but only while resting or during short breaks.

Planting your palms on the support while typing can place the wrists in an extended posture and limit mobility to the keys, causing the small muscles of the fingers to be overworked and overextended. The hands should be able to float over the keys while keyboard work is being performed. This also applies to the mouse and other input devices which have a palm rest.

![Palm Support Diagram](image)