

# Office Ergonomics

# Office Ergonomics - Keyboard Selection and Use

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# How do I select a keyboard

There are many different designs of keyboards available. There is no universally agreed on 'best' keyboard design. It is recommended that users try different models and see which model suits their needs. The goal is to achieve a neutral wrist position. Neutral position generally means the wrist is aligned straight with the forearm – it is not bent or extended in any direction.

However, if a person spends a lot of time using the keyboard, their hands, arms, shoulders and back will still get tired. Therefore, remember to take short breaks to <u>stretch</u> and let the muscles recover.

#### General tips include:

- Select keyboards or accessories (such as a keyboard tray that tilts) that allow the user to
  elevate either the back or front of the keyboard, whichever position helps to maintain a
  neutral wrist posture.
- Consider using a shorter (35.6 cm or 14" long) keyboard instead of a regular (45.7 cm or 18" long) one. A shorter keyboard will help reduce the need to overreach or lean. It will also provide more options for the <u>computer mouse</u> placement.
- Consider using a split keyboard if the user has a broad chest or to reduce an ulnar deviation (pain on the side of the wrist opposite the thumb). A split keyboard divides the keyboard into two sections. The design may allow the arms and wrists to point inward without the elbows having to be as close to centre.
- Consider a tented keyboard for those with conditions such as epicondylitis (inflammation of tendons in the arm) to help achieve a neutral arm position.

- Select a keyboard that has the appropriate "action". The user should not need to press the keys forcefully. Alternatively, if the keyboard is too sensitive, extra characters may appear that need further movement to correct.
- Left-handed users may prefer a keyboard with the numeric pad to the left, or to use a separate numeric pad.

# Where should the keyboard be placed?

Place the keyboard directly in front of the user, with their shoulders relaxed and elbows close to the body. The wrists should be straight and in-line with the forearms.

- Use an overall set-up that is height adjustable the desk, chair, and keyboard.
- To avoid overreaching, place the keyboard (and mouse) close to the front the desk or surface but not right at the edge (about 5m or 2 inches). The elbows should stay close to the body with the hands reaching the keyboard comfortably.

## What should be considered when using a keyboard?

Good body position is important.

- Adjust the keyboard, chair, or desk so that the wrist is in a neutral position.
- Do not rest your wrists on the desk surface. The pressure on the wrist may contribute to contact stress injuries.
- Keep elbows at approximately 90 degrees (between 90 and 110 degrees) to help relax your shoulders and forearms. The forearms should be horizontal (even) with the floor.
- Select accessories, such as a wrist rest, if needed and appropriate.
- Include the keyboard as part of an overall ergonomic set up of the workstation.

Please see other OSH Answers documents for more information on <u>office ergonomics</u>, <u>working in a sitting position</u>, and <u>working in a standing position</u>.

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