

# DID YOU KNOW?

## CONSIDER THE STATISTICS

Organisations which employ strategies to improve workplace ergonomics have found that WRMSDs (resulting in lost work time) were three times less likely to occur.

(Source: Schneider)

**3.5 MILLION**

working days lost due to work-related upper limb or neck disorders

**10.7 MILLION**

days lost due to musculoskeletal disorders

(Source: HSE, published 2008, in the period of 2006-2007)

## NEW CASES OF UPPER LIMB OR NECK WORK-RELATED MSDs

370 people per 100,000 workers

Up 37% since previous year

Up 23% since 2001/02 (rate was falling in intervening years)

(Source: HSE, published 2008, in the period of 2006-2007)

**44%** of workers sit in tiring or painful positions

**61%** of workers have repetitive hand or arm movements

**55%** of workers use a computer for 25% or more of the day

**38%** of workers used a computer for 75% or more of the day

(Source: European Working Conditions Survey 2005, published 2007)

## WORKING WITH TECHNOLOGY WITH POOR ERGONOMICS CAN BRING ABOUT PHYSIOLOGICAL AND PSYCHOLOGICAL PROBLEMS

The persistent discomfort that results from poor ergonomics can lead to dramatic increases in conditions such as repetitive strain injuries (RSIs) and work-related musculoskeletal disorders (WRMSDs). Implementing good ergonomics can lead to a healthier workforce, reducing long-term health conditions and increasing productivity.

Research in the US has shown that for every dollar invested in an ergonomic intervention strategy in an office environment (e.g. RSI prevention),

**THERE IS A RETURN OF \$17.50**

(Source: Buckle)

## INCIDENCE OF ILLNESS

**38%** of all illnesses in the working population are musculoskeletal disorders (MSDs)

**18%** of all illnesses in the working population are upper limb or neck disorders

**34%** increase in people affected by upper limb or neck disorders since previous year

(Source: HSE, published 2008, in the period of 2006-2007)

**73%** of DSE (display screen equipment) users reported 1 or more MSD

**47%** of DSE users had neck pain

**39%** of DSE users had shoulder pain

**37%** of DSE users had back pain

Prevalence of MSD symptoms in DSE users unchanged in 15 years

(Source: HSE Report RR561, published 2007)



# ERGONOMICS IN THE WORKPLACE



## THE LAPTOP

- 1 Ensure that your chair is set up correctly as per the manufacturer's instructions and that you are seated at the correct height in relation to your workstation.
- 2 Use a laptop stand which will allow you to raise the top of the screen to the correct viewing height.
- 3 Use a separate keyboard and mouse on a suitable work surface.
- 4 The laptop screen should be placed directly in front and facing you, so that your body and neck aren't twisted when looking at the screen.
- 5 The laptop should be at a comfortable horizontal distance for viewing, which is usually around an arm's length (sit back in your chair and raise your arm and your fingers should touch the screen). If your legs are not reaching the floor, use a footrest.



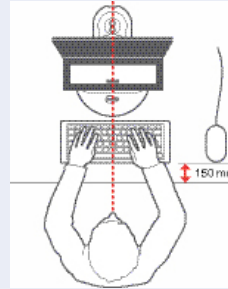
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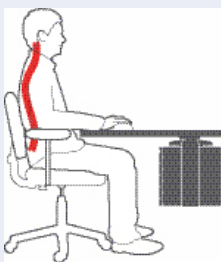
## DID YOU KNOW?

With laptop sales increasingly outstripping those of desktop computers, back experts are pointing to the growing dangers for laptop users. The risk posed by laptops to our backs, shoulders and necks as we lean over them at home, work and on the train is encouraging an epidemic of musculoskeletal problems.

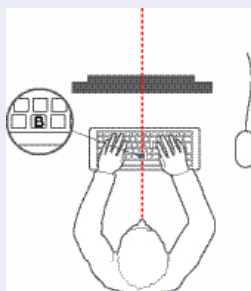


## THE MONITOR

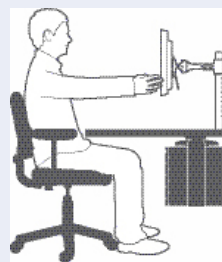
- 1 Ensure that your chair is set up correctly as per the manufacturer's instructions and that you are seated at the correct height in relation to your workstation.
- 2 The computer monitor should be placed directly in front and facing you, so that your body and neck aren't twisted when looking at the screen.
- 3 Viewing distance - the monitor should be at a comfortable horizontal distance for viewing, which is usually around an arm's length (sit back in your chair and raise your arm and your fingers should touch the screen).
- 4 Place the monitor at a comfortable viewing height that doesn't make the user tilt his or her head up or bend their neck down to see it. For a standard monitor, the top of the viewable part of the screen should be level with your eyes.
- 5 Screen image should be legible, flicker-free, stable and free from glare and reflections. It should also tilt and swivel easily to suit the user's needs. If your legs are not reaching the floor, use a footrest.



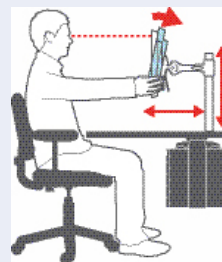
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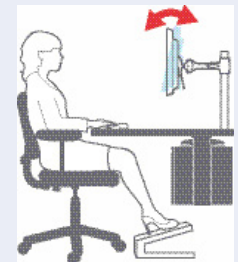
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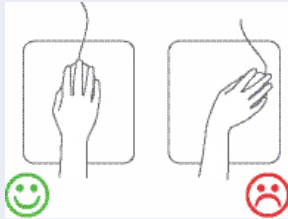
## THE ITALIAN CONNECTION...

During their time studying in Milan, Peter and Brenda built strong connections with Olivetti through the Italian designer Sottsass. Peter then led a joint research programme between CBS and Olivetti into workstation ergonomics.

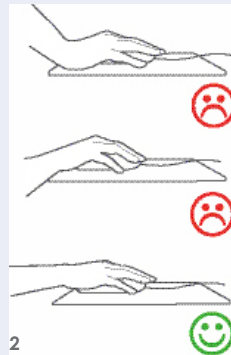


## THE MOUSE

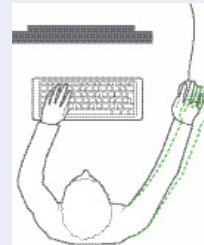
- 1 When handling the mouse, keep your hand in a straight line with your forearm. Avoid bending the palm at the wrist: either to the left or right, or up or down.
- 2 Avoid mouse shapes that may cause the wrists or fingers to be bent sideways or upwards when grasping the device.
- 3 Movement of the mouse should come from the whole arm and shoulder, not just the wrist.



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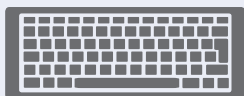


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## DID YOU KNOW?

Forming your wrists to an unhealthy angle when using the mouse can have a negative effect on your body causing aches and pains, as well as joint and/or tendon infections. Follow these steps to improve wrist health.



## THE KEYBOARD

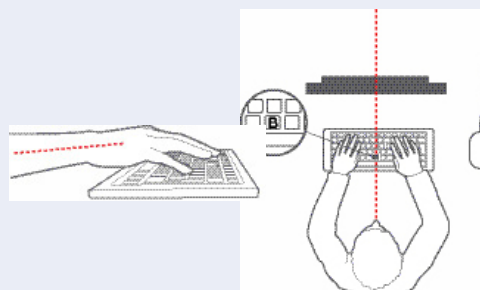
- 1 Always ensure that your wrists are in the neutral position, which means the hands and wrists are in line with your forearms.
- 2 Your chair and seated position should be relative to the height of the desk and your position to the work surface and keyboard. In general terms this means the keyboard and mouse should be just below your elbow height when your forearms are parallel to the floor.
- 3 The keyboard should rest on the desk, set in a negative tilt position, which means that the front of the keyboard (space bar edge) is lower than the back. To ensure that the keyboard is fully centralised, the letter 'B' should be in line with your bellybutton.
- 4 There should be at least a hand's width (100-150mm) space between the keyboard and the edge of the desk to rest your hands.



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## DID YOU KNOW?

The following helpful keyboard ergonomic tips will increase your well-being and help to prevent the development of RSIs and cumulative trauma disorders (CTDs).