

Display Screen Equipment

Introduction

The use of the term display screen equipment (DSE) not only refers to desktop and laptop computers but also includes working with cathode ray screens, liquid crystal displays and many types of laboratory equipment e.g. microscopes. The standards that are to be applied to DSE type work are contained in University Policy Statement [S8/09](#). The policy is concerned with all aspects of usage, including posture and furniture, visual factors, breaks, environment and training. It is intended to minimise the incidence of work related upper limb disorders.

A number of DSE assessors have been appointed within the Department of Physics who will undertake ergonomic assessments for employees who are regular DSE users. The term “user” applies to University employees using DSE for continuous spells of an hour or more at a time and on a regular daily basis. Users may also include agency employed “temps”.

Guidance for employees working with DSE equipment at premises controlled by themselves (often at home) is given in University Policy Statement [S8/09](#).

Possible health effects of DSE work

A variety of work related upper limb disorders may be associated with DSE use, although the precise causal pathway is unclear. Anybody who works with DSE within the Department of Physics and is experiencing discomfort or aches and pains that they believe may be attributable to their work should immediately inform their supervisor and DSE assessor. If necessary, a referral to the University’s Occupational Health Service will then be made.

There are no known adverse effects on the eye or on the eyesight due to DSE work. However, some users experience temporary visual fatigue leading to eye discomfort and may require advice on reducing this effect. Existing eye conditions are not made worse by DSE work, but it is logical to use the appropriate sight correction for such work, as would be expected with any other job needing visual skills.

Tips for Healthy Computing

The use of display screen equipment (especially computers) is commonplace throughout the Department and the following information is given for self-help but does not, however, remove the need for DSE users to receive a formal DSE assessment by one of the Department’s assessors.

- Breaks and changes of activity

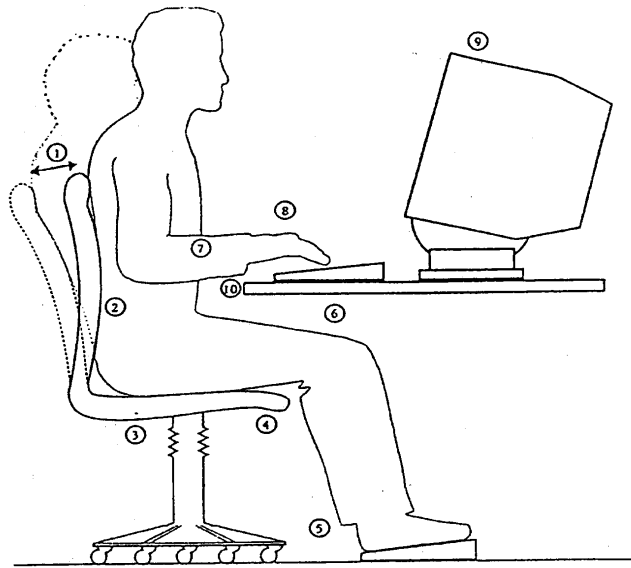
If you are using a computer for long periods of time ensure that you arrange to take informal breaks away from the screen that allow you to vary your posture. An informal break of 5 – 10 minutes every hour is more beneficial than 15 minutes every two hours.

- Eyes and eyesight testing

DSE users are entitled to request eye and eyesight tests, at no cost to themselves, through the DSE assessor for the area in which they work. The frequency of necessary re-testing is normally every two years unless otherwise specified by the optometrist*. The reasonable cost of any corrective eyewear recommended by the optometrist* will also be met.

*Employees are not entitled to see an ophthalmic practitioner of their choosing for these tests. Information on University nominated opticians is available from the DSE assessor for your area.

- Seating and posture for typical computing tasks:



- 1 Seat back independently adjustable for height and for tilt. Do not slouch your shoulders forward and tilt your chin up. Adjust the seat back to keep your shoulders back and chin down.
- 2 Good lumbar support.
- 3 Seat height adjustable.
- 4 No excess pressure on underside of thighs and backs of knees.
- 5 Foot support, if needed.
- 6 Space for postural changes, no obstacles under desk.
- 7 Forearms approximately horizontal. Adjust seat so that your elbow is at an angle of 90 degrees or greater while you are typing.
- 8 Minimal extension, flexion or deviation of wrists i.e. keep wrists straight – no sagging!
- 9 Screen height and angle should allow comfortable head position. Try to look down onto, or directly at, the computer screen.
- 10 Space in front of keyboard to support hands/wrists during pauses in keying.

Laptop Computers

Prolonged users of laptops should in general use a separate keyboard, monitor and mouse. The use of a laptop docking station is acceptable providing the keyboard is at the correct angle and the screen at the correct height. The principles regarding posture and breaks / changes of activity outlined above are also similarly appropriate for laptop computers.

Mouse usage

Prolonged use of a mouse can also cause work related upper limb disorder. DSE users whose work involves much mouse work should seek to use a mixture consisting of mouse work and alternatives, e.g. trackballs, tablets, mice or keyboard activated commands.

Minimum Workstation Requirements

DSE Workstations in the University are to conform to the standards laid down in UPS [S8/09](#). The DSE assessment process is designed to identify whether there are deficiencies in these requirements.