



Guidance on Visual Display Units



WHAT'S THE DIFFERENCE BETWEEN A VDU, A VDT, A MONITOR AND DISPLAY SCREEN EQUIPMENT (DSE)?

There isn't one. All these terms mean the same thing - a display screen, usually forming part of a computer and showing text, numbers or graphics.

DISPLAY SCREEN EQUIPMENT – POSSIBLE EFFECTS ON HEALTH

Display screen equipment has been blamed - often wrongly - for a wide range of health problems. In fact, only a small proportion of computer users actually suffer ill health as a result of their work. Where problems do occur, they are generally caused by the way in which the computer is being used, rather than by the computer itself. So problems can be avoided by good workplace and job design, and by the way you use your computer workstation.

A) Pains and discomfort

A range of conditions of the arm, hand and shoulder areas linked to work activities are now described as work related upper limb disorders. These range from temporary fatigue or soreness in the limbs to chronic soft tissue disorders like peritendinitis or carpal tunnel syndrome. Some keyboard operators have suffered occupational cramp. The contribution to the onset of any disorder of individual risk factors (e.g. keying rates) is not clear. It is likely that a combination of factors are concerned. Prolonged static posture of the back, neck and head are known to cause musculoskeletal problems. Awkward positioning of the hands and wrist (e.g. as a result of poor working technique or inappropriate work height) are further likely factors. Outbreaks of soft tissue disorders among keyboard workers have often been associated with high workloads combined with tight deadlines. This variety of factors contributing to display screen work risk requires a risk reduction strategy, which embraces proper equipment, furniture, training, job design and work planning.

B) Eye and eyesight effects

Medical evidence shows that using display screen equipment is not associated with damage to eyes or eyesight; nor does it make existing defects worse. But some workers may experience TEMPORARY visual fatigue, leading to a range of symptoms such as impaired visual performance, red or sore eyes and headaches, or the adoption of awkward posture, which can cause further discomfort in the limb. These may be caused by:

- (a) staying in the same position and concentrating for a long time;
- (b) poor positioning of the display screen equipment;
- (c) poor legibility of the screen or source documents;
- (d) poor lighting, including glare and reflections;
- (e) a drifting, flickering or jittering image on the screen.

Like other visually demanding tasks, computer work does not cause eye damage but it may make workers with pre-existing vision defects more aware of them. Such uncorrected defects can make work with a display screen more tiring or stressful than would otherwise be the case.



Guidance on Visual Display Units



The health risks associated with computer work can be greatly reduced by

- providing the right equipment and setting it up correctly
- assuming the right posture and in particular
 - sitting upright
 - ensuring straight wrists
 - sitting face in to the workstation
- Organising work so that there are short periods spent away from the workstation doing other things

HEALTH AND SAFETY (DISPLAY SCREEN EQUIPMENT) REGULATIONS

WHO IS AFFECTED?

The Regulations affect staff that habitually use computers for a significant part of their normal work Defined in the Regulations as “Users”)

WHAT DO EMPLOYERS HAVE TO DO TO COMPLY?

The Regulations do not contain detailed technical specifications or lists of approved equipment. Instead, they set more general objectives. Employers have to:

ANALYSE WORKSTATIONS OF EMPLOYEES COVERED BY THE REGULATIONS AND ASSESS AND REDUCE RISKS

They need to look at the hardware, the environment, and factors specific to the individuals using the equipment. The views of those individuals may be sought as part of the assessment. Where risks are identified, the employer must take steps to reduce them.

ENSURE WORKSTATIONS MEET MINIMUM REQUIREMENTS

These are good features that should be found in a workstation. For example, the screen should normally be able to tilt and swivel in all directions. This allows individuals to find a comfortable position for the screen, helping to avoid muscular problems in the upper part of the body.

PLAN WORK SO THERE ARE BREAKS OR CHANGES OF ACTIVITY

The length or number of these is not specified precisely in the Regulations, as the need for breaks depends how intensely and for how long the employee has been using the workstation. But short, frequent breaks are better than longer, less frequent ones.

WHAT (AND WHO) ARE USERS?

The Regulations apply to a class of people called “users”. A “user” is defined in the Regulations as “an employee who habitually uses display screen equipment as a significant part of his normal work”. This definition can be difficult to apply to the workplace. Staff who meet the following criteria would most certainly be regarded as “users”:

- Use it for continuous or near-continuous spells of an hour or more at a time
- Use it in this way more or less daily.

In practice almost all members of staff in the Company who make use of computers will be “users”.



Guidance on Visual Display Units



Checklist for Computer Workstation Assessment

User _____ Location _____ Dept _____

	Yes	No
Chair - 3 way adjustable		
Chair set at correct height - upper arm vertical and forearm horizontal; adjust back of chair to support lower back		
Foot rest supplied if required		
Screen is directly in front of user (or immediately to the side of any document holder) and keyboard parallel to edge of table		
Screen a suitable distance from the user and at the correct height		
Space in front of keyboard to rest hands when not keying		
Mouse and mouse mat within easy reach – close to keyboard		
Document holder supplied if required		
Screen is clean with a clear image		
Screen does not suffer from glare and reflections		
Adequate space beneath table for posture changes		
Posture of user - upright with no flexure of wrists and lower back supported		
User's work pattern - regular activity changes		
User is aware of health risks associated with intensive computer work		

Other points:

Assessed by _____

Signature _____

Date _____

Name of user _____

Signature _____

Date _____



Guidance on Visual Display Units

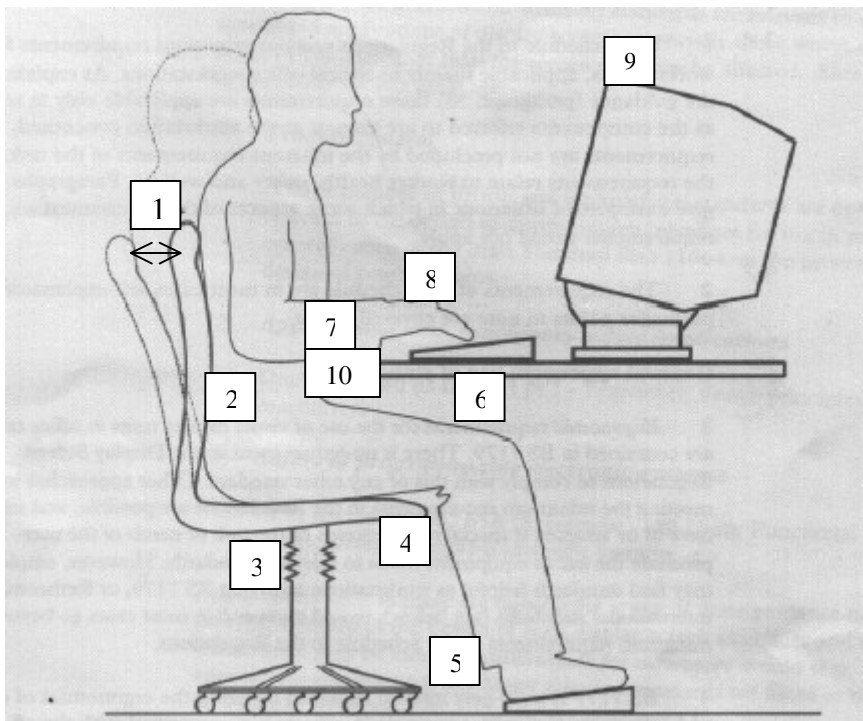


POSTURE

Good Seating and Posture at a Workstation

10 important points

- 1) Adjustable seat back
- 2) Good lumbar support
- 3) Adjustable seat height
- 4) No excess pressure under thighs
- 5) Foot rest (if needed)
- 6) Space under table
- 7) Upper arms vertical, forearms approx horizontal
- 8) Minimum flexion at wrists
- 9) Screen height and angle to give comfortable head position
- 10) Space in front of keyboard to support hands during pauses in keying





Guidance on Visual Display Units



TRAINING FOR USERS

It should be possible to provide users with adequate training “one-on-one” at the same time as carrying out an assessment.

Some Departments might find that it is more useful to provide group training for staff.

Training for users needs to cover:

1) The health risks (particularly upper limb problems) and how relatively easy it is to minimize the risks.

2) What the company does to minimize the risks • Provide the right equipment to those at risk.

3) What users can do to minimize the risks?

- Use the equipment correctly (adopt the correct posture)
- Ensure computer work is interrupted with regular changes in activity

4) What users should do if they feel they have a problem?

- Users should contact their Head of Department to report a fault/problem. If the Dept Head does not rectify the problem, the user should follow the chain of command as per the company Health and Safety policy to pursue help in solving the problem.

EYE TESTS

The Company is required by the Health and Safety (Display Screen) Regulations to provide users who so request it with eyesight tests. Any user wishes to take up their entitlement to an eyesight test should first Contact their Head of Department. If the Head of Department considers it necessary or if the users wishes to see an optician then the user will be referred to an optician appointed by the company.

The Company is also required by the Health and Safety (Display Screen) Regulations to meet the costs of any spectacles which are required specifically to correct vision defects at the viewing distances used for display screen work (if the user has not already been prescribed corrective lenses for other uses such as reading, driving etc). The company will pay the cost of a basic pair of spectacles only. If the user wishes to choose a more costly pair of spectacles (for example, with designer frames), the user is liable for any monies above the cost of a basic pair of glasses.

LAPTOPS

Laptops and other portables have to be compact and easy to carry. The resulting design features, like small keyboards, can make prolonged use uncomfortable, unless steps are taken to avoid problems, e.g. by using a plug in mouse and keyboard. It is best to avoid using a portable on its own if full-sized equipment is available. And like other VDU users, people who habitually use a portable should be trained how to minimize risks. This includes sitting comfortably, angling the screen so it can be seen clearly with minimal reflections, and taking frequent breaks if work is prolonged. Wherever possible, portables should be placed on a firm surface at the right height for typing.