



Display Screen Equipment (DSE)

Some workers may experience fatigue, eye strain, upper limb problems and backache from overuse or improper use of DSE. These problems can also be experienced from poorly designed workstations or work environments. The causes may not always be obvious and can be due to a combination of factors.

How to control the risk

As an employer, you need to assess the risks associated with using DSE and any special needs of individual staff. Our 'DSE Workstation Assessment Checklist' can help you assess these risks.

Few workplaces stay the same, so it makes sense to review what you are doing on an ongoing basis. The risks from DSE can be controlled using the following straightforward, low-cost controls.

Posture and working environment

- Forearms should be approximately horizontal and the user's eyes should be the same height as the top of the screen.
- Make sure there is enough work space to accommodate all documents or other equipment. A document holder may help to avoid awkward eye and neck movements.
- Arrange the desk and screen to avoid glare, or bright reflections. This is often easiest if the screen is not directly facing windows or bright lights. Adjust curtains or blinds to prevent intrusive light.
- Make sure there is space under the desk to move legs. Excessive pressure from the edge of seats on the back of legs and knees should be avoided. A footrest may be helpful, particularly for smaller users.

Keyboards and typing

- A space in front of the keyboard can help rest the hands and wrists when not keying. Effort should also be made to keep the wrists straight when typing / keying.
- Good keyboard technique is important. This can be achieved by keeping a soft touch on the keys and by not over-stretching the fingers.

Using a mouse

- The mouse should be positioned within easy reach, so it can be used with a straight wrist.
- Users should sit upright and close to the desk. This will reduce the need to work with a mouse with an outstretched arm. The keyboard should also be moved out of the way if it is not being used.
- Forearms should be supported on the desk, and the mouse should not be gripped too tightly.
- Fingers should rest lightly on the mouse buttons and shouldn't be pressed too hard.

Reading the screen

- Individual characters on the screen should be sharp, in focus and don't flick or move. If they do, the DSE may need servicing or adjustment.
- The brightness and contrast controls on the screen should suit the lighting conditions in the room.
- Select colours that are easy on the eye (avoid red text on a blue background, or vice versa). The screen surface should also be kept clean.



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Changes in activity

Breaking up long spells of DSE work helps prevent fatigue, eye strain, upper limb problems and backache. As the employer you need to plan, so users can interrupt prolonged use of DSE with changes of activity. Organised or scheduled rest breaks may sometimes be a solution. Advise users to:

- Stretch and change position, look into the distance from time to time and to blink often.
- Change activity before the eyes get tired, rather than to recover.
- Take short, frequent breaks. Shorter breaks are better for users than long, infrequent ones.

Timing and length of changes in activity or breaks for DSE use is not set down in law, and arrangements will vary depending on a particular situation. Employers are not responsible for providing breaks for the self-employed.

Portable computers / laptops

These same controls will also reduce the DSE risks associated with portable computers / laptops. However, the following may also help reduce manual handling, fatigue and postural problems:

- Consider potential risks from manual handling if users have to carry heavy equipment and papers.
- Whenever possible, users should be encouraged to use a docking station or firm surface and a full-sized keyboard and mouse.
- The height and position of the portable's screen should be angled so that the user is sitting comfortably and reflection is minimised (raiser blocks are commonly used to help with screen height).
- More changes in activity may be needed if the user cannot minimise the risks of prolonged use and awkward postures to suitable levels.
- While portable systems not in prolonged use are excluded from the Regulations some jobs will use such devices intermittently and to support the main tasks. The degree and intensity of use may vary. Any employer who provides such equipment still has to risk assess and take steps to reduce residual risks.

Using DSE assessors

If you employ many users of DSE, it might help to appoint someone competent to act as an assessor. The assessor can help to identify who is covered by the Regulations, assess workstation risks and put control methods in place. They can also be used to provide training to others.

Trained assessors can help you recognise risky workstation layouts, environments and practices. Make sure whoever you choose to become an assessor (it may be more than one person) knows what is expected of them. You will also need to make sure assessors have taken any necessary actions to tackle the problems that have been identified.

It is worth providing assessor training on the following:

- How to review user assessments or checklists to identify any additional controls.
- How to tackle problems the user is unable to solve.
- Deciding when additional information and help is needed, and where to go for it.
- How to record significant findings.



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Training products for assessors are available from many organisations and whatever training methods you use, you should check afterwards that assessors have understood the information and reached an adequate level of competence.

When analysing the completed checklists, it may be useful for assessors to consider the following:

- Deal with the biggest problem first and investigate all reports of aches and pains from users.
- Try to identify the causes of risk by looking at all potential causes. For example poor posture may be due to bad seating, or sitting awkwardly to avoid glare on the screen, or leaning forward to use the keyboard because the arm rests prevent it from being close enough to the workstation, or a poorly positioned mouse.
- Remember to assess all the risks - look at things like task demands and changes in activity, as well as physical aspects of the workstation.
- Take account of individual's special needs, such as users with a disability.

Review

DSE assessments need to be reviewed when:

- Major changes are made to the equipment, furniture, work environment or software.
- Users change workstations or the nature of work tasks change considerably.
- It is thought that the controls in place may be causing other problems.

Providing eye tests and any necessary spectacles for DSE work

There is no evidence to suggest that DSE work will cause permanent damage to eyes or eyesight. Eye tests are provided to ensure users can comfortably see the screen and work effectively without visual fatigue.

If a user or potential user requests an eye test you are required to provide one. If the test shows that the user needs glasses specifically for DSE work, you must pay for a basic pair of frames and lenses. Eye tests are not an entitlement for the self-employed.

Users are entitled to further tests if DSE work is considered to cause them visual fatigue and at regular intervals after the first test.

The arrangements you make to provide eye and eyesight tests can vary. For example, some employers let users arrange tests for themselves (and give the employer the bill).

The following may help you when setting up your arrangements:

- Contact a number of opticians to make sure you get a competitive rate.
- Ask if they will come to you to carry out the eye tests.
- Ask for standard information about each user test. This should say if the user needs glasses for DSE work and when they should be re-tested.
- Tell users what arrangements you have made.
- Make sure users understand what you will and will not pay for.

You only need to provide glasses for the DSE work. If users' normal glasses are suitable for DSE work, you don't need to pay for them. You don't have to pay for expensive frames or lenses.



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Screen

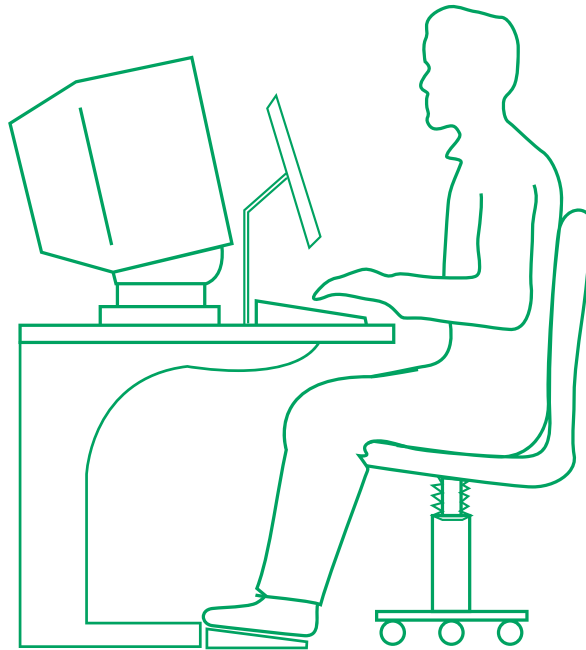
Position it at a comfortable position and distance.

Adjust brightness / contrast / distance / angle, if causing eye fatigue.

Position it at right angles to windows and to avoid glare from fluorescent lights.

Mouse

Position so it can be used with the wrist straight and so the forearm can be supported by the desk.



Chair

Adjustable height and back rest.

Good lumbar support.

Adjust to allow feet on floor (or footrest); back straight, and arms to rest at right angles to the desk.

Keyboard

Separate from screen with adjustable tilt.

Keep wrists straight, elbows at 90° and arms parallel to the floor.