

DISPLAY SCREEN EQUIPMENT (DSE)

Display screen equipment

The ill-health effects associated with display screens include the following.

- Visual discomfort (eye fatigue and headaches).
- Upper limb disorders, collectively known as musculoskeletal disorders, such as carpal tunnel syndrome. Symptoms include numbness, tingling or aching of the hands, fingers and limbs.
- Aches and pains (back, shoulder, neck or wrist aches).



The risk of suffering from these conditions depends on the working environment, how the workstation is set up, how it is used and how the work is organised. Unsafe uses of display screens include:

- working with a poor posture
- working too long without a break or change of position
- poor working environment
- poor management of workload.

There have been many misconceptions about display screens. There is no conclusive evidence that display screens give off harmful radiation, cause complications during pregnancy or epileptic seizures or fits. Display screens do not damage eyesight. However they can cause visual fatigue or eyestrain due to the work or the working environment.

“Users” are those who habitually use a display screen as a significant part of their work.

- high risk users use DSE all day and every day
- moderate risk users use DSE a few hours every day
- low risk users use DSE for short periods but not everyday
- non-users use DSE very occasionally.

The workstation includes:

- the chair
- a footrest, if required
- the keyboard, mouse or other input devices
- the display screen equipment
- the worktop layout

A properly set up and adjusted workstation is important to general health and long-term well-being. There is no single, perfect workstation arrangement that suits every user or any one job. Each individual will need to adjust it to their own specific needs and the work they are doing.

Adjusting the chair to the correct position

1. Seat height and tilt. Adjust the height of the chair's seat so that the forearms are about horizontal with the keyboard. Adjust the tilt (if the seat has this feature) so that the thighs are horizontal and the feet are flat on the floor or the footrest. The aim is to rest the weight on the buttocks, not on the thighs.
2. Back pad. The back pad may or may not be independently adjustable – adjust it to support the lower back so it fits the natural inward curve of the spine. Adopt an upright posture with an erect head and relaxed shoulders, but avoid a rigid posture. Frequently varying position helps avoid stiffness, but always return to a healthy upright position.
3. Arm rests, if present on the chair, should not interfere with the keying and should allow the chair under the desk. If possible, adjust them to suit you. If they cause problems, report this to your manager or supervisor. Try to avoid using the arm rests during keying – use them between tasks.
4. Chair position. When positioning the chair it is important to allow enough room under the desk for changes in position. You may want to stretch or cross your legs during the day, or move your chair to work on another part of the desk.

Ensuring good posture

1. Adopt a relaxed but not rigid position – change position regularly.
2. Do not remain fixed. Regular changes of position are important – move about and change position, but always return to an upright posture.
3. Practice good posture. It can take a while to learn or to change bad habits. It may cause some back or shoulder ache to start with as muscles get used to new positions.

Environment

Maintaining a good work environment is equally important. Keep the temperature, ventilation and, where possible, the humidity at natural levels. If other people have different needs, come to a sensible compromise.

Other adjustments

1. Adjust the seat so that the forearms are level with the desk and at about keyboard height.
2. Make sure the wrists are in a relaxed position.
3. Put the feet flat on the floor or on the footrest.
4. Make sure there is enough room in front of the keyboard to rest hands between keying.
5. Adjust or move the screen to prevent glare either from daylight or artificial light.
6. Report any problems to your manager or supervisor.
7. Adjust brightness and contrast to suit.
8. Keep the screen clean.
9. Face the screen with the head in a natural position. Adjust the screen so that the top is just below the eye line. Touch typists may prefer to face a document holder and have the screen to one side. Either way is suitable providing it means there are reduced head movements.
10. Keep everything required for the job close at hand to avoid twisting, stretching, reaching or leaning.

Sitting at a desk all day can be hard on a body. To remain supple and prevent stiffness there are some simple exercises that can help prevent the onset of fatigue and aches and pains, loosen muscles and maintain flexibility.

1. Warm up. Just before starting work, flex the fingers and wrists. Rub your hands together to warm up the muscles.
2. Eyes. Regularly look away from the screen at objects in the far distance, either at the extremes of the workplace or outside if possible.
3. Neck. Face straight ahead, slowly turn the head one way then the other. Roll your head from side to side.
4. Shoulders. Shrug the shoulders and release.
5. Arms. Reach the arms straight over the head and stretch.
6. Back. Move slightly forward on the chair, straighten up raising your chest up and out. Hold for a few seconds, and then relax.
7. Wrists and hands. Flex and rotate the wrists, spread the fingers as wide as possible and hold for a few seconds.
8. Repeat the above exercises a few times.

Display screen user’s checklist

Correct posture

- Is the chair at the right height?
- Is the display at the right height?
- Are the arms horizontal with the keyboard?
- Are the feet flat on the floor or footrest?
- Is the backrest adjusted to support the back?
- Are you sitting in an upright posture?

The risk of ill health or injury is related to how the equipment is used. To reduce the risk:

- The workstation must be set up correctly.
- The equipment must be used properly.
- The work must be suitably organised.
- Be aware of the possible health risks.
- Follow the rules and work safely.
- Report problems.

QUESTIONS – (there may be more than one correct answer)

		A	B	C
1	What ill-health effects are associated with display screens?	Visual discomfort	Carpal tunnel syndrome	Stomach ache
2	Risk of suffering from ill health depends on what?	The amount of coffee and tea you consume	Working environment	Adverse weather conditions
3	How do you remain supple and prevent stiffness?	Minimise movement	Regularly flex the body	Perform vigorous short term exercises
4	What is the correct position of your forearms with the desk?	Lower than desk	In line with desk	Higher than the desk
5	Who should you report problems to?	Your next of kin	Your workmate	Your supervisor

