



West Lothian
Council

Display Screen Equipment Guide for Managers and Users



Occupational Health & Safety
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Display Screen Equipment Guide for Managers and Users

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Display Screen Equipment (DSE) Guide for Managers and Users

1. INTRODUCTION

- 1.1 In accordance with the Health and Safety (Display Screen Equipment) Regulations 1992 (amended 2002), employers are required to risk assess the display screen equipment, workstations (e.g. furniture, etc.), work environment and job design of ALL users of DSE.
- 1.2 This guide is designed to help you understand the requirements of the Regulations, including the obligations placed upon the council and your responsibilities.
- 1.3 This guide also sets out advice on how best to use the furniture and other aspects of workstations for the comfort of employees at work.

2. DEFINITION OF DISPLAY SCREEN EQUIPMENT

DSE in most cases refers to visual display units (VDUs) or similar. It includes equipment such as microfiche viewers etc. but not televisions.

3. DEFINITION OF DSE USERS

The Regulations' definition of a user is complex. To simplify matters users are defined as employees who:

- are authorised by the Director to use DSE; and
- normally use DSE on a daily basis for a continuous spell of at least one hour at a time (or an equivalent duration, e.g., continually for one day a week, etc.);
- cannot do their job without being dependent on the use of DSE.

4. RISK ASSESSMENTS

- 4.1 All display screen equipment workstations and the immediate environment must be assessed to identify and minimise any possible risks to users.
- 4.2 Managers must arrange for DSE Risk Assessments to be undertaken by a designated person, who has completed a basic training session, and who is deemed competent to assess the workstations.
- 4.3 Any risks identified should be rectified at the time of the assessment if possible (e.g. re-organise workstation layout or adjust seating), or as soon as is reasonably practicable following the assessment.
- 4.4 The designated assessor should review progress after an agreed interval and report any outstanding issues to the manager.

4.5 Risk assessments require to be reviewed if:

- the display screen worker relocates to another workstation;
- individual capability changes;
- there is a major change in workstation equipment, furniture or layout;
- there is a substantial increase in the volume of DSE work requiring, for example, more speed or accuracy;
- the workstation is relocated;
- the lighting is significantly modified.

4.6 A 'Display Screen Equipment Risk Assessment' form is attached as Appendix 1

5. TRAINING

Managers must ensure that DSE users:

- receive health and safety training on the requirements of the Display Screen Equipment Regulations;
- are advised to access the 'Display Screen Equipment Guide for Managers and Users' on the council's Intranet under Occupational Health & Safety.

6. VDUS - THE POSSIBLE EFFECTS ON HEALTH

6.1 The introduction of VDUs and other display screen equipment has been associated with a range of symptoms related to eyesight and working posture. These are not unique to display screen work or an inevitable consequence of it. Indeed research shows that the risk to any display screen equipment user from typical display screen work is low.

6.2 Risks can be readily prevented by applying certain ergonomic principles to the design, selection and installation of display screen equipment, the design of the workplace, and the organisation of the tasks undertaken at the workstation.

6.3 Problems relating to VDU work do not appear overnight, but are the result of poor working postures and environments over a considerable period of time. Users can often prevent problems arising by making simple adjustments to the arrangement of their workstation.

6.4 Upper limb pains and discomfort

6.4.1 A range of conditions of the arms, hands and shoulder areas linked to DSE equipment work activities are now described as work related upper limb disorders, or WRULDS. These can range from temporary fatigue or soreness to long term disorders.

6.4.2 It is likely that a number of risk factors contribute to the onset of these disorders. These factors include:

- prolonged static posture of the back, neck and head;
- awkward positioning of the hands and wrists;
- working to tight deadlines with high workloads.

6.4.3 Guidance is given later to assist you in reducing these risks.

6.5 Eyes and eyesight

6.5.1 Medical evidence shows that using display screen equipment is not associated with damage to eyes or eyesight; nor does it make existing defects worse.

6.5.2 However, some users may experience **temporary** visual fatigue, leading to a range of possible symptoms such as impaired vision, red or sore eyes and headaches. These may be caused by:

- staying in the same position and concentrating for a long time;
- poor positioning of the display screen equipment;
- poor legibility of the screen or source documents;
- poor lighting, including glare and reflections;
- poor screen images.

6.5.3 Guidance is given later to assist you in reducing these risks.

6.6 Fatigue and stress

6.6.1 Many symptoms described by DSE workers reflect stresses arising from their tasks. They may be secondary to upper limb or visual problems, but are more likely to be caused by poor job design or work organisation.

6.6.2 The risks of experiencing physical fatigue and stress can be minimised, however, by following the principles underlying the regulations, i.e. by careful design and selection of DSE; good design of the workplace, environment and task; and by training and giving information to you, the user.

6.7 Other concerns relating to display screen equipment

6.7.1 Epilepsy

DSE has not been known to induce epileptic seizures. There is a very rare form of epilepsy known as photosensitive epilepsy that affects 1 in 10,000 people. These people react adversely to flickering lights and patterns, but find they can safely work with display screens.

People with epilepsy who are concerned about display screen work should seek further medical advice from either the Medical Adviser, or their own GP.

6.7.2 Radiation

VDUs give out both visible light and other forms of electromagnetic radiation, which can be harmful above certain levels. However, **the levels of radiation emitted from VDUs are well below the safe levels set out in international recommendations.** It is therefore not necessary to test radiation levels from VDUs, nor is it necessary to use special devices such as so-called protective spectacles, screens or aprons.

6.7.3 Effects on pregnant women

There has been considerable public concern given to the reports of higher levels of miscarriage and birth defects among some groups of VDU workers due to electromagnetic radiation. However, the results of many scientific studies do not show any link between miscarriages or birth defects and working with VDUs.

In light of this scientific evidence pregnant women do not need to stop work with VDUs. However to avoid problems caused by stress and anxiety, West Lothian Council will afford all pregnant women with the right to be temporarily relieved from VDU duties to work on alternative duties within the Section or Service Area.

Women who are pregnant or planning children and are worried about working with VDUs should seek informed medical advice from the Medical Adviser, or their GP.

6.7.4 Dermatitis

A small number of people have experienced irritation, skin rashes or had existing skin problems aggravated by the use of VDUs. The exact cause is not known, but it seems possible that a combination of dry air, static and the susceptibility of the individual may be involved.

If such irritations are experienced, reducing the levels of static, and raising the humidity levels may help.

7. ADJUSTING YOUR WORKSTATION

7.1 There is no such thing as one correct sitting posture, and deliberately changing the way you sit during the day will help to reduce the risks of experiencing aches and pains. However, certain postures should be avoided.

7.2 It is important to achieve a good working posture and you should make full use of any adjustment facilities your display screen equipment, workstation, and work environment allow you. The person conducting the risk assessment on your workstation will identify if any of the furniture you use is not suitable for display screen work.

7.3 The following steps should be followed:

7.3.1 Adjust your seat height

- Sit in front of the display screen equipment and adjust the height of your seat so that your forearms are roughly horizontal and your wrists are straight when your hands are on the keyboard;
- If your feet are not comfortable on the floor, or there is pressure on the back of your thighs from the seat edge, then you may benefit from the use of a properly designed footrest. Not everyone will need a footrest. However, should the risk assessment indicate that you require a footrest, one will be provided;
- If your desk is adjustable for height, adjust the seat first to ensure your feet are comfortable on the floor, then adjust the desk height so that your forearms are straight whilst at the keyboard;
- If you sit too high or too low you will be forced to type with bent wrists or in a hunched position, causing discomfort to your wrists, arms, shoulders, neck or back.

7.3.2 Adjust your screen position

- the height and angle of your screen will influence the posture you adopt whilst working. If the viewing angle is wrong you may suffer discomfort or pain in the neck or shoulders;
- usually the most comfortable position is when the top of the screen is about level with your eyes when looking straight ahead. The purpose is to find the level that places least strain on neck and eye muscles.

7.3.3 Adjust your backrest

- this is probably the most important single adjustment you can make to ensure your comfort;
- adjust the height of the backrest so that the lumbar support fits snugly into the curve in the small of your back;
- avoid slouching or sitting on the edge of your seat as you will not get any support from the backrest if you do;
- adjust the slope of the backrest to give you proper support in a reasonably upright or slightly backward leaning posture and avoid slouching forward.

7.3.4 Adjusting the display screen equipment

- adjust your keyboard and screen to get a good keying and viewing position. You should be able to raise, tilt or twist the screen so that the viewing angle feels comfortable. A space in front of the keyboard is helpful for resting the hands and wrists when not typing;
- the keyboard and screen should be directly in front of you, and not at an angle;
- don't bend your hands up at the wrist when keying. Try to keep a soft touch on the keys and don't over stretch your fingers. A good keyboard technique is important;
- when using a mouse, have it within easy reach. You should not have to stretch to reach it. Do not grip the mouse tightly and avoid swinging your wrist for side to side.

7.3.5 Reflections and glare

- Arrange your desk and screen so that bright lights are not reflected on the screen. Avoid sitting with windows or bright lights directly in front or behind your screen;
- If possible sit at right angles to light coming in through the windows;
- Adjust curtains or blinds to prevent unwanted light;
- Adjust lighting levels, either by use of the room lighting, or task lighting such as desk lamps;
- Adjust the brightness and contrast controls on the screen. Adjust them throughout the day to suit the lighting conditions;
- As a last resort anti-glare screens should be used.

7.3.6 Other adjustments

- Try different layouts of the keyboard, screen and document holder to find the best arrangement for you. Make sure the equipment you need is placed near you on the desk. Don't have items placed e.g. telephone, where you will have to stretch to reach them;
- Make sure you have enough work space to take whatever documents you need. A document holder may help you to avoid awkward neck movements. If one is used, try to position it at the same height and distance as the screen;
- Make sure the characters on your screen are sharply focused and can be easily read. They shouldn't flicker or move;
- Make sure there are no layers of dirt, grime or finger marks on the screen. Clean the screen regularly with approved cleaning materials;
- You should have a clear space under your desk for your legs and feet. Any obstructions e.g. waste bins, recycling bins and drawers should be repositioned.

8. PORTABLE DISPLAY SCREEN EQUIPMENT

- 8.1 Portable Display Screen Equipment (Portable DSE) is becoming common in the workplace and includes items such as Laptop Computers. Whilst this equipment has presented the opportunity of working remotely, prolonged periods of use may make it difficult to achieve a comfortable, suitable working posture.
- 8.2 Portable DSE should not be in non-ideal situations. These are situations where you may adopt an unsuitable posture e.g. in a car or sitting on a bed. Extended use should be avoided in situations where the laptop is used resting on your lap.
- 8.3 Where laptops are provided as the main computer either in the office or possibly for working at home then the minimum accepted standard will be to use a laptop stand (to elevate the screen), a separate keyboard and a separate mouse. At your main workstation a docking station is preferable because the viewing screen is larger than a laptop viewing screen and it is therefore promotes a better posture.
- 8.4 Where you are using Portable DSE in home working situations, this must be carried out in accordance with West Lothian Council's framework document on home working. In these situations equipment and furniture must meet the same standards as required within the workplace.
- 8.5 When using Portable DSE put the screen in comfortable viewing position. (See Adjusting Your Workstation). Avoid working in slouched/ unsupported working postures. Always try to use a properly designed workstation with appropriate equipment.
- 8.6 When transporting Portable DSE reduce the amount of weight you have to carry by leaving unnecessary items behind e.g. printers and spare batteries. Do not carry items unless they are needed. Take into account other items you may be carrying e.g. bags and files.
- 8.7 If you are using Portable DSE outwith the office on your own:
- Do not carry Portable DSE in bags with manufacturers branding. Consider carrying in a suitable backpack which is unmarked. This will also distribute the weight of the load evenly;

- Do not leave any Portable DSE equipment on view in your car;
- Take care in public places or areas where the risk of theft may be greater;
- Make sure someone knows where you are and you have a reporting system in place if you are not returning to the office or do not return to your office when expected;
- If someone challenges you for the equipment then do not resist. Always consider your own safety first.

9. ORGANISING YOUR WORKING DAY

- 9.1 Sitting in the same position for long periods can cause aches and pains, and temporary visual fatigue. An effective way of avoiding such aches and pains is to arrange your display screen work so that it is interrupted with other tasks.
- 9.2 There are no recommended maximum periods for working at a screen. In general it is better to take frequent short breaks than to have occasional longer breaks. Taking a break from screen work does not mean that you stop work altogether, but that you do something else instead - a change is as good as a rest.
- 9.3 Normally the work mix of DSE users will not require the user to be exclusively reacting to a screen display for prolonged periods. However, where a user is involved in prolonged and intensive visual tasks requiring continuous reaction to a screen display then a break of ten minutes, on non-screen duties, should be taken, wherever practicable, after every hour of such activity.
- 9.4 Where you break from working at the screen, you should try to get out of your seat, stretch your legs, arch your back and generally move about. You should avoid activities that use similar repetitive hand movements to typing. Looking out at a distance is an effective way of resting your eyes.

10. ENTITLEMENTS

- 10.1 Under the Regulations, users of DSE (see Section 3) are entitled to receive a sight test from a qualified optician. Exercising this entitlement is entirely voluntary. Sight tests are currently given free of charge in Scotland.
- 10.2 The council does not have a duty to provide eyesight tests and corrective appliances to users who are not directly employed by the council. Agency temps should contact their own Agency in this regard.
- 10.3 If, following a full sight test conducted by a qualified optician, corrective appliances (normally spectacles) are prescribed **specifically for DSE work**; the council will refund the cost of a basic appliance up to the value of £55.
- 10.4 Where a user is prescribed corrective appliances for general use incorporating a special prescription for DSE (e.g. Varilux lenses or similar where there is a section specifically for use when operating DSE), the council will only reimburse the costs attributable to the DSE use, up to the value of £55.
- 10.5 The council will not pay for:
- the cost of corrective appliances prescribed for purposes other than DSE use (i.e. not for long or short-sightedness or other conditions where appliances are not specifically prescribed for DSE work);
 - designer frames, tints, etc.

11. CLAIMS PROCEDURE

11.1 Recognised DSE users (this does not include Agency temps) who wish to claim for reimbursement of corrective appliances must:

- obtain a 'Reimbursement of Optical Charges' form;
- complete section 'A' of the form;
- ask their manager to complete section 'B';
- arrange a full sight test with an optician;
- ask the optician to complete section 'C';
- complete section 'D';
- return the optician's receipt together with the completed reimbursement form to Human Resources for arrangement of appropriate payment.

11.2 A 'Reimbursement of Optical Charges' form is attached as Appendix 2 to this document.

12. ADDITIONAL INFORMATION



If you require additional information on any aspects of the display screen equipment regulations, or working comfortably with display screen equipment you can contact the following people:

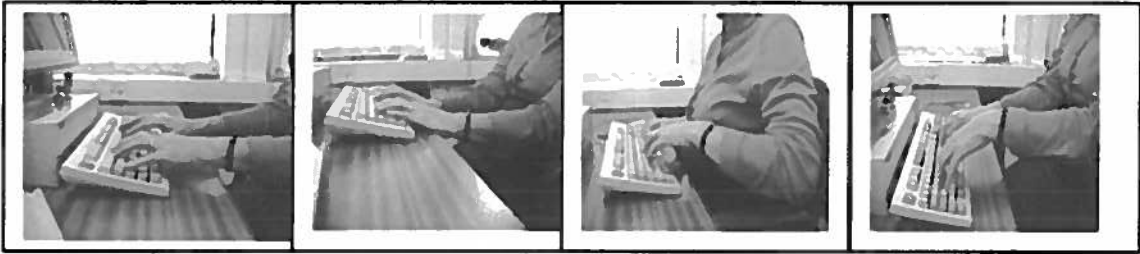
- The person conducting the risk assessment on your workstation.
- Your service area Health and Safety Adviser on (01506) 281428






DISPLAY SCREEN EQUIPMENT WORKSTATION ASSESSMENT

User Name:	Assessors Name:
Job Title:	Date:
Location:	Line Manager:

	Tick		Suggestions	Further Action Taken
	Yes	No		
DISPLAY SCREEN Are the characters well defined?			If no, check that the screen is clean and use only approved screen cleaner. Ensure that text and background colours do not clash.	
Is the image stable without flicker?			If yes, try using different screen colours to reduce flicker. Does it need to be referred to IT help desk Tel 01506282828.	
Are the brightness and /or contrast adjustable?			If unsure refer to user manual.	
Does the screen swivel and tilt?			If not built in, can it be added?	
Is the screen free from glare and reflections? ✘  ✔ 			Use a mirror in front of the screen to check where the reflections are coming from and try to shield the screen from source of reflection Try adjusting the screen that use dark characters on a light background. Check that there are adjustable windows coverings i.e. a blind. Blinds should close and there should be none missing. If not they should be replaced. If necessary, can the desk be moved?	

	Tick		Suggestions	Further Action Taken
	Yes	No		
KEYBOARD Is the keyboard tiltable and separate from the screen?			This is non-negotiable for desktop computers. If it is not then it must be replaced.	
Is the keying position comfortable? (see pictures below)			Hands should not be bent up at the wrist. Do not hit keys hard with fingers. Keep fingers relaxed and do not over stretch them.	
				
	✓	x	x	x
Is there enough space to rest hands in front of keyboard?			Can the monitor be pushed further back to create more room?	
Does the keyboard have a non-reflective surface?			If reflective it should be replaced.	
Are the characters on the keyboard legible?			Keyboards should be kept clean. If characters cannot be read then the keyboard may need replaced.	
WORK SURFACE Is the work surface large enough for documents, monitor, keyboard etc.			Create more room by re arranging equipment, paper or work if uncomfortable. If more electrical sockets are required then they must be provided so equipment can be moved to a suitable location.	
Is adequate space available to find a comfortable work position?			Re arrange equipment, papers, and telephone to ensure that you do not have to stretch to reach items you are working with. Again sockets may need to be provided or moved.	
Is the surface free from glare and reflection?			Consider mats, or blotter for larger areas.	
Is an adjustable document holder available?			One should be provided if copy typing is conducted If staff are transferring data from paper to PC then a document holder should be considered.	

	Tick		Suggestions	Further Action Taken
	Yes	No		
MOUSE Is device positioned close to the user?			The mouse should be placed as close as possible during use to prevent over stretching to use. The mouse should not be gripped tightly during use. Mouse 'ball' should be cleaned regularly.	
CHAIR Is the chair stable?			If not stable, chair should be adjusted, repaired / replaced.	
Does the chair have the following features? : Seat pad can be adjusted in height? Seat back adjust in height? Seat back adjust in tilt? Five castor base?			If no then chair must be replaced.	
Does chair have adjustable arms?			If a chair has arms then they must be adjustable. If arms are not adjustable then they must be removed from the chair. Arms must not prevent the workstation user from sitting close to the workstation.	
Is the small of the back supported by the chair?			Adjust seat back rest until the small of the back is supported.	

	Tick		Suggestions	Further Action Taken
	Yes	No		
IS THE USER COMFORTABLE? Are the user's arms horizontal and not over stretched when using the keyboard? (see pictures below)			Readjust position. If you need to, rearrange desk to get a comfortable working position.	
 <p style="text-align: center;">x</p>				
 <p style="text-align: center;">x</p>				
 <p style="text-align: center;">✓</p>				
Are the user's feet flat on the floor?			If not flat may cause pressure on the backs of legs and knees. A footrest should be provided.	
Are elbows horizontal with the desk?			Height of chair must be adjusted to allow this. If feet not flat on the floor then a footrest should be provided.	
Are the user's eyes roughly the same height as the top of the monitor?			If not then adjust monitor.	
Are there any obstructions underneath the desk?			This includes boxes and desk drawers. If yes, they must be removed.	
INFORMATION TO USERS Have you been given a copy of 'A Guide for Display Screen Equipment Users'			Must be provided to all users. Speak to your manager.	
Do you operate the computer continuously for more than an hour daily?			User is entitled to a free eyesight test. Speak to your manager.	
Have you been informed of the need to mix screen and non-screen based work where possible?			5 – 10-minute break should be taken away from the screen every hour. Try to organise work to alternate tasks.	
Have you been informed of the reporting procedure for health and safety problems?			Speak to your manager.	
Have you been informed how to adjust the position of furniture and equipment?			Speak to your manager.	

	Tick		Suggestions	Further Action Taken
	Yes	No		
Have you been informed of the need for regular cleaning of screens and equipment?			Equipment must be cleaned regularly, using only approved cleaners.	
HEALTH			Staff who are users under the regulations are entitled to have their eyesight test costs reimbursed. Ask your manager for details.	
Do you wear glasses for:				
Screen				
Screen and other				
Other reasons (please detail)			If you experience any of these symptoms, please detail how often and when below:	
Don't wear them				
Do you ever experience the following when working with display screen equipment?				
Stiff neck				
Headaches				
Ache in Shoulders				
Ache in arms				
Ache in wrists				
Pain in fingers				
Pain in back				
Other (please Detail)				
PORTABLE COMPUTER EQUIPMENT (Laptops, PDAs, etc)				
Where do you use your portable computer equipment:			There are situations where laptops should not be used.	
At a Desk				
At Home				
Car				
At other location (e.g. clients home, remote office)				

	Tick		Suggestions	Further Action Taken
	Yes	No		
If you use portable equipment do you also have a:			Users of portable computer equipment must have a separate docking station or desktop computer at their main workstation. Please refer to document 'Guidance for Display Screen Equipment Users' for details.	
Desk top PC				
Docking station				
Separate keyboard and mouse				
If you work from home has your home been assessed for suitability?			Wherever a workstation is set up then assessment must be made of the area. Ask your line manager for this to be carried out.	
How long do you use a portable equipment for:			You must mix screen-based work where possible. No more than two hours should be spent working on portable equipment daily.	
1-2 hours				
2-3 hours				
3-5 hours				
5 hours or more				
Do you work alone when using portable computer equipment?			A Lone Worker Risk Assessment and Reporting systems must be in place so that hazards are reduced and staff movements are known in case of emergencies	
Do you carry other equipment with you when you are using your portable computer equipment e.g. printer, case files, brief case?			Manual handling risk assessment should be undertaken. Staff should not be lifting / carrying large amounts of weight.	
Any other comments:				



REIMBURSEMENT OF OPTICAL CHARGES



All sections must be completed before this form is submitted in order to process the claim.

Section A and D by employee

Section B by Line Manager

Section C by Ophthalmic Optician

Section A (To be completed by employee)

Name:
Establishment:
Designation:
Pay Number:

Section B (To be completed by Line Manager)

I confirm that the above named employee is authorised to use Display Screen Equipment and does so on a daily basis for a continuous period of at least one hour.

Name:
Designation:
Signed: Date:

Please complete Sections C and D overleaf

Section C (To be completed by Ophthalmic Optician)

I / We have examined and confirm that:

(Please ✓ box below as applicable)

No corrective appliances are needed	
Corrective appliances for general use have been supplied	
Corrective appliances for general use, incorporating a special prescription for DSE use have been supplied	
Corrective appliances for the sole use of DSE have been supplied	

Name of Optician:	
Address:	
Date of Test:	Date lenses supplied:

Branch Stamp:

~~~~~  
**Section D (To be completed by employee)**

I am claiming reimbursement of corrective appliances

|                       |   |
|-----------------------|---|
| Total amount Claimed: | £ |
|-----------------------|---|

I certify that the above information is correct and I attach a valid Optician's receipt.

|         |       |
|---------|-------|
| Signed: | Date: |
|---------|-------|

Completed form should be submitted to:

|                                                                                    |
|------------------------------------------------------------------------------------|
| Human Resources, West Lothian Civic Centre, Howden South Road, Livingston EH54 6FF |
|------------------------------------------------------------------------------------|

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For Office Use Only

Actioned in HR by:	cc Personal file:
Reimbursement authorised: £	To Payroll (date):
Received in Payroll (date):	Actioned by: