**Coventry** City Council

# Display Screen Equipment

Guidance for Assessors



### Introduction

This document provides additional guidance to DSE assessors who may be required to support employees during or after their DSE self-assessment. Practical tips are highlighted in **bold italic text.** 

## 1. The Law and DSE Users

Health problems can occur when operators spend long periods using DSE equipment. Issues include soreness of the eyes, headache, discomfort in the neck and limbs and general tiredness.

Due to these potential health problems, legislation exists to control the use of DSE equipment. In addition to general duties laid upon both the employer and the employee by the Health and Safety at Work Act, further specific duties are included in the Health and Safety (Display Screen Equipment) Regulations when a person is a "DSE User"

A 'DSE User' is defined by Coventry City Council as an employee who uses DSE for at least one hour each day, or who is specifically required to use DSE to carry out their work on a daily basis.

## 2. Possible Health Hazards/Concerns

As part of the DSE- self assessment process, employees are asked whether they have any health related issues which may impact upon DSE use. If this is the case, support from a DSE assessor will more than likely be required to complete the assessment.

The majority of symptoms described by DSE operators are a reflection of body fatigue. The symptoms can be divided into those arising from the visual system; those relating to work posture; and those related to the nature and organisation of the work itself. Correct design, selection and installation of DSE, and appropriate design of the operator's work area can largely overcome the first two factors.

**WRULD** - A Work Related Upper Limb Disorder (WRULD) - previously referred to as Repetitive Strain Injury (RSI) - is caused by repetitive and often awkward and/or rapid movements usually by the wrists and hands over a long period. It may also affect elbows, shoulders and necks. Repetitive rapid movements can result in tendons, tendon sheaths or muscles becoming inflamed, or nerves compressed (e.g. Carpal Tunnel). WRULDs can become painful and, if not treated at an early stage, can result in restricted use of the affected part.

WRULDs have a slow onset and are usually characterised by cramp-like aches and pains in the hands, fingers and wrists accompanied by some numbness. The symptoms usually clear up when away from the keyboard. Anyone suffering these types of symptoms must report them to their supervisor or the Occupational Health Unit immediately - so that action can be taken to avoid any permanent damage or injury.

**Eyestrain** – probably the most common problem experienced by operators. In general, it is a result of difficulties in seeing information displayed on the screen. This is affected by image quality, glare and reflection from the screen, ambient lighting, eyesight and work design factors. It is important that DSE Users have regular eyesight tests.

**Facial Rashes** - a small number of DSE operators have reported facial skin complaints. It is more likely these are due to environmental factors such as low humidity. Any concerns should be referred the supervisor and to the Occupational Health Unit.

**Epilepsy** - DSE does not cause epilepsy and, in general, persons suffering from this illness should not be prevented from undertaking DSE work. However, individuals who suffer from a rare form of photosensitive epilepsy could, in exceptional circumstances, be at risk of having a fit induced by the flickering image on the DSE screen. Persons known to be suffering from photosensitive epilepsy should be medically examined by the Occupational Health Unit before being employed on DSE work.

## 3. Eyesight Testing / Examination

The Health and Safety (Display Screen Equipment) Regulations require that any person categorised as a 'user' is entitled to an eye screening or full ophthalmic examination at no personal cost. If corrective appliances (spectacles, lenses) are required **solely for use with DSE** then the employer is required to bear the cost of the appliances, or part of the appliances, which are needed.

To obtain a free eye test, the employee's supervisor must first verify whether the employee falls within the definition of a user by completing the Eye Examination Form and sending it to the Occupational Health Unit (OHU). An appointment must then be made with the OHU for an eye-screening test, which may also include referral to the ophthalmic optician for a full eye examination. Only examinations undertaken at the City Council's appointed optician will be reimbursed. Contact the OHU on 024 7683 3285.

# 4. Pregnant employees and those with disabilities

There does not appear to be a significant risk to the reproductive function (including fertility) due to DSE operation. The DSE self-assessment is not suitable for employees with disabilities or pregnant employees.

Any employee who is concerned about operating DSE whilst pregnant, or has any health worry which they believe is associated with DSE use can discuss the matter in confidence with an Occupational Health Advisor, Occupational Health Unit on 024 7683 3282.

## 5. Training

All employees classed as a 'user' should receive adequate training on how to set up their DSE, and on how to conduct a self-assessment. This can be done through e-learning or by a toolbox talk. Training for employees must be recorded on resource link.

## 6. Equipment and Workstation Assessments

A requirement of the DSE Regulations is to undertake an assessment of each DSE workstation. Once an employee has completed their DSE training, they should undertake the DSE self-assessment and forward it to their manager or DSE assessor for action on any issues noted by the employee. As part of the assessment process employees should be encouraged to make minor adjustments to their workstations if they are experiencing any DSE-related issues. These may include:

- Altering the height and/or angle of the display screen to reduce strain on neck and shoulder muscles
- Using a detachable keyboard rather than a laptop keyboard, and making sure that it is comfortably sited on the desk
- Trying out a wrist rest, or padded mouse mat to provide additional support for the wrists
- Trying out a footrest to alter the angle of the users body and reduce the strain on upper body muscles
- Trying a document holder if space is at a premium and/or the employee transfers a lot of written information by typing
- Changing the layout of their work area to reduce stretching, twisting and excessive head/neck movements

Assessments must be retained and reviewed at least every 3 years, or immediately if the work pattern or personal circumstances of the user change (e.g. pregnancy, health issues).

The following actions can be considered if a workstation does not meet the guidelines laid out in the Display Screen Equipment Self-Assessment

#### Screen

- Has the user tried to alter the height/angle/distance of the screen?
- Does the user know how to make adjustments to the text size/magnification and the brightness and contrast?
- Has the user angled the screen away from any glare from lighting and windows?

#### Keyboard

- Has the user tried moving the keyboard to provide maximum support for their hands/ wrists?
- Does the user use the separate numeric key set with separate cursor control keys if input is mainly numeric?
- Is the keyboard in good working order with both adjustable feet In place?

#### **Work Desk**

- Does the user have sufficient leg space under the desk which is free from cables/boxes etc?
- Is the work area generally tidy and allows the user to work without reaching/twisting etc?
- Is there sufficient room in front of the keyboard to support hands/wrists?

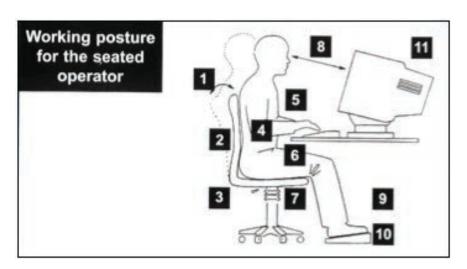
#### Chair

- Does the user know how to adjust the height and tilt of the seat?
- Does the user know how to adjust the height and tilt of the backrest and lumbar support?
- Are arm rests (or lack of) causing a problem for the user, and do they need to be removed (or use a chair with armrests)?
- Is the user's posture and comfort improved by using a foot rest, and is the foot rest of the right size/height for the user?

#### Mouse/Mouse pad

- Is the mouse clean (underneath), in good condition and does it move freely?
- Does the user have any discomfort in their wrist, lower arm or elbow which may be due to incorrect use or type of mouse/mouse pad?
- Is the user aware of different types of ergonomic mouse which could relieve discomfort in the wrists/lower arms?
- Is the mouse mat clean and in good condition?
- Is there room to support the user's wrist/forearm when using a mouse and is there room for them to move it freely and at a comfortable distance?

#### **Posture of Operator**



The aim of the adjustments listed above is to encourage good posture. The picture above shows the ideal working posture for seated operators using appropriate equipment.

- 1 Seat back adjusted properly
- 2 Good lumbar support
- 3 Seat height adjusted correctly feet on floor and thighs supported
- 4 Forearms are approximately horizontal
- 5 Movement of the wrists is reduced where possible
- 6 There is space in front of the keyboard to support hands
- 7 Chair base is long/short enough to support thighs properly
- 8 Comfortable focal distance to the screen
- 9 Space for upper and lower legs to move, no obstacles under the desk
- 10 Foot support is available if needed
- 11 Screen height and angle allow comfortable head position

#### **Source Documents**

- Has the user considered a document holder to help reduce excessive head, neck and eye movements?
- Place document holders on optimum side for user dominant eye effect, or centrally for non touch typists

#### **Printers / Noise**

• Ensure noise from printers is not a distraction or noise hazard for DSE users

#### **Laptops and Tablets**

Whilst portable display screen equipment (laptops and tablets) are excluded from the DSE Regulations unless in prolonged use, it is Council policy that the same principles are applied equally to the use of such equipment.

Laptops and other portable computers have to be compact and this results in design compromises, like smaller keyboards and screens. Avoid using a portable for long periods if full-sized equipment is available. People who regularly use a portable should be trained how to minimise risks. This includes sitting comfortably with good posture, angling the screen so it can be seen clearly with minimal reflections, and taking frequent breaks. Wherever possible, portables should be placed on a firm surface at the right height for keying. Docking stations or separate a keyboard and mouse should be used wherever possible.

#### **Agile Working**

Where hot desking and agile working are in place, the user should still carry out an assessment of their work area and make suitable adjustments to the chair, desk, lighting etc to enable them to work comfortably.

#### **Environmental Factors and Work Regime**

In deciding where to locate DSE in a workplace, it is most important that glare and reflection on the screen from light sources are avoided or kept to a minimum as detailed above. In some cases, it may be desirable to segregate the DSE from other work functions by positioning screen(s) in a separate area.

Adequate ventilation should be provided and the relative humidity maintained between 40 and 60%. The ambient temperature should be comfortable and range between 18 and 23°C.

Offices are quite often warm and the humidity can be low. This can affect how quickly a user's eyes become fatigued, resulting in headaches and eyestrain. Increasing the humidity and/ or reducing the temperature can help reduce these symptoms. Reminding DSE users to stay properly hydrated will also help reduce the likelihood of these symptoms.

The work regime of the operator also needs to be considered, with regular breaks away from the screen and DSE-related work, ideally at least 5-10 minutes per hour. A break can involve a change of activity such as answering the phone, filing, photocopying etc.

Remember to consider the use of laptops, tablet and other mobile DSE devices when used for long periods of time on meetings, interviews etc, and ensure that there are proper breaks in DSE-related activities and an opportunity for people to exercise wrists, fingers and neck muscles and joints.

Operators should also be aware that regular exercising on the hands, wrists and shoulders (using simple stretching exercises whilst at the workstation) can prevent onset of WRULD and related problems.

#### **Maintenance**

It is important that the PC and ancillary equipment are properly maintained and that the screen is kept clean. Equipment should be PAT tested in line with council requirements, and cables, power leads etc should be kept tidy beneath desks to reduce the risk of trips.



#### For further information contact:

Occupational Health, Safety and Wellbeing Service 024 7683 3172 or e-mail healthandsafetyservicesadmin@coventry.gov.uk

Health and Safety Executive website: Click here

Council Intranet: Click here

If you need this information in another language or format please contact Health and Safety on 024 7683 3172