

Using Display Screen Equipment (DSE)

Learning for Defined DSE Users

Welcome

Welcome to the Display Screen Equipment (DSE) learning package; learning, quiz and self -assessment. This document has been produced for colleagues who cannot access WILMa.

The learning package has been produced for all Warwickshire County Council (WCC) employees who are Defined DSE-Users.

The DSE package has been designed to help Defined DSE Users in identifying risks relating to poor DSE use and how to implement safe working practices.

This learning module is the first element of the DSE learning package. When you have completed the DSE learning module you will then need to attempt the quiz questions to confirm your learning.

Induction and Overview



Surveys by the Health and Safety Executive (HSE) of workers using DSE show that many experience pain and discomfort following long periods working with DSE. This results in the loss of a great number of working days each year.

Health problems related to use of DSE include upper limb disorders and repetitive strain injuries. These problems can involve the neck, shoulders, arms and back. Tiredness and eye strain may also be experienced.

Injuries caused by or exacerbated by DSE use can be serious enough to warrant surgery, and in some cases can lead to permanent disability.

What is a DSE User?

Within WCC we have two types of DSE User:

1) A Non-Defined DSE User is someone who only uses DSE on an 'ad hoc' infrequent basis. Quite simply, it is those employees who use DSE but do not satisfy the criteria of a defined DSE User.

2) A Defined DSE-User is someone who habitually uses DSE as a significant part of their normal work. It is up to individual line managers to determine which employees fall within the definition of a Defined DSE User.

The definition of DSE is not limited to typical office situations consisting of computers. It relates to any device or equipment that has an alphanumeric or graphic display screen, regardless of the display process involved; it therefore includes both conventional display screens (monitors used for desk top PC's) and those used in associated technologies such as laptops, tablets, touch-screens, smart phones. It does not include calculators or where the main use is to display television or film and other similar devices

What is DSE Training Important?

Many of us spend long periods at our desks, looking at the screen and using the keyboard.

This may cause headaches, eye strain and muscle pain, unless you use DSE appropriately and you ensure that your workstation is set up correctly before you start, wherever you sit.

If you spend a large part of your working day using the DSE, your manager should provide the correct equipment and environment to ensure your comfort / correct ergonomic position (e.g. work breaks which enables you to undertake other work activities other than DSE which generates different movement).



You and DSE



Employer

Your employer is responsible for assessing and reducing the potential risks of using a workstation, taking into account:

- The entire workstation (screen, chair, keyboard, mouse etc)
- The job being done at the workstation
- Any special needs of the person using the workstation.



Employee

You are responsible for:

- Adjusting the elements of your workstation to suit your needs in the interest of your own health and safety
- Requesting and using any additional equipment that will promote your health and safety at the workstation (e.g. a document holder or a footrest)
- Bringing to your employer's attention any discomfort, pain, or other disorder (e.g. eye strain) that you experience when sitting at your workstation. This can be done through your DSE Self Assessment

What are the Potential Risks of Using DSE?

The risks from DSE work are actually quite small, and in fact are easily avoidable if they are managed. For example, the workstation is set up correctly and you know what to do to reduce risks to yourself.

What do you think are the potential risks of DSE use? Select from the options below

- ☐ Eye related (such as, eye strain)
- ☐ Musculoskeletal problems (such as, upper limb disorders, back ache)
- ☐ Radiation from computer
- ☐ The computer will not work properly
- ☐ Fatigue and stress

Go to the next page to find out the answers

The correct answers are:

- Eye Related (Such as, eye strain)
- Musculoskeletal problems (Such as, upper limb disorders, back ache)
- Fatigue and stress



Poor DSE use and your body

If your posture is poor or your sitting position is incorrect when you use DSE, your body will have to work harder to allow you to continue at your task. In those parts of your body that are feeling the strain, it is likely that you will eventually feel discomfort or pain. If working in this manner for prolonged periods of time.



The numbers on the diagram above demonstrate the kind of problems that arise. See the next page for further information on each one.

1

Back

Stress on the neck and shoulders can travel down the spine, causing additional aches and pains lower down the back. If the legs are incorrectly positioned, this can put strain on the lower back, causing stiffness and aching.

2

Neck

If you hold your head at an angle for any length of time, the neck muscles holding it in position will tire and ache, and will eventually feel painful.

3

Eyes

When the eyes are looking at a fixed point for more than a few minutes, your eyes begin to tire. Eye strain can also result if the lighting at the workstation is too bright or too dim.

4

Arms and Hands

If the arms are not in a natural position parallel with the desk and keyboard for any length of time you may feel discomfort and/or pain in the fingers, wrists, lower arms, elbows, upper arms and/or shoulders.

5

Legs and feet

Your legs may ache if they are not comfortably positioned, you may also experience problems with circulation.



Musculoskeletal Problems

Musculoskeletal problems (MSDs) means anything associated with your muscles, bones or joints. The symptoms can range from simple aches and pains in the back, neck, shoulders (upper and lower limbs), sensory loss, tingling or "pins and needles" to conditions such as Repetitive Strain Injury (RSI), or Carpal Tunnel Syndrome.

They can be caused by long periods of rapid, repetitive actions or prolonged static positions - particularly when adopting awkward positions.

In a few cases they may become persistent or even disabling.

Incorrect use of DSE may make a pre-existing condition worse.



Eye Related

Working with DSE cannot damage your eyesight. It can, however, highlight an existing problem.

Spending long continuous periods of time at a DSE workstation can cause visual fatigue (particularly if your monitor is not set up correctly or is not the right one for your work activity).

Problems can include blurred vision, dry, itchy, aching or tired eyes, or difficulties focusing on the image. These in turn may lead to headaches.

If you have difficulty reading the screen, it may be related to a defect with your vision. This can cause you to sit awkwardly to read the screen better, which in turn can cause posture problems.



Fatigue and Stress

Stress manifests itself in various forms, including physical tension, which in turn can lead to fatigue. A fatigued person is vulnerable to further stress and therefore to other ill health conditions that are associated with long term exposure to stressors. Fatigue can also cause you to slouch at the workstation which in turn can cause posture problems.

Pressure to meet deadlines, increased demands or an increased pace of work can lead to fatigue.



Which of the following are common with prolonged DSE User?

- ☐ Dermatitis and other skin diseases
- ☐ Musculoskeletal Disorders
- ☐ Problems linked to radiation
- ☐ Increased risks to pregnant women and their child
- ☐ Eye Strain
- ☐ Stress and Fatigue



Go to the next page to find out the answers

The correct answers are:

- Musculoskeletal Disorders
- Eye Strain
- Stress & Fatigue



How to Reduce the Risks

- Setting up the workstation (please note, your workstation includes; the work environment, workstation equipment, work activity and layout) correctly
- Being proactive in preventing discomfort - for example, by taking regular 'work breaks', adjusting your posture (exercises may be of benefit to you), completing a DSE self-assessment, raising any issues of concern to your manager, and getting your eyes tested regularly

All of these will be covered in the following section



The Working Environment

There are environmental factors that can affect your comfort while working:

- The amount of space available to you
- The level of lighting, both natural and artificial
- Glare
- The level of noise
- The temperature and humidity



Space

- Make sure you have sufficient space around your desk to move and vary your position
- Ensure that there is enough legroom under your desk

Lighting

- The lighting should be bright enough to allow you to read documents easily, without affecting the visibility of the display screen. Sometimes it may be necessary to have additional task lighting if your work requires it.
- If you have any concerns regarding lighting, raise this with your manager.

Glare

Glare is caused by bright areas such as windows, lights or reflections.

There are several things that you can do to minimise glare:

- Adjust the position and angle of your screen
- Sit at a workstation with a window to the side of the screen if at all possible
- Curtains or blinds can reduce the effects of sunlight

Noise

- Normal office noise is not usually seen as a health risk. It is a nuisance/distraction that can upset your concentration and thus lead to mistakes which can in turn lead to frustration.
- Raise any concerns with your manager.

Temperature

- Of all the environmental factors, temperature is the most difficult to control to the satisfaction of all workers. This is because different people feel comfortable at different temperatures.
- Different actions can be taken to improve temperature preferences for individuals (e.g. provision of a fan or alternatively wearing layers of clothing).
- However, if the temperature is significantly affecting you at work, raise this with your manager.
- Although legally there is a minimum workplace temperature there is no maximum.

Humidity

- You probably won't be able to directly feel a lack of humidity in your work area, but you may recognise it by symptoms, such as, dry / sore eyes, skin feels dry, static shock when you touch door handles.
- If any of these symptoms are causing you problems, raise this with your manager.

An example of good DSE practice



Go the next page to learn more

1

Your Keyboard

When typing do not support your wrists on the edge of the keyboard or desk. Don't bend your hands up at the wrist when typing. Bending your hands in an unnatural position can cause discomfort and may lead to permanent injury.

- Place the keyboard in a comfortable position
- Adjust the angle by raising or lowering the legs
- Your lower arms should be horizontal when typing
- Leave a space in front of the keyboard to support your hands and arms when you are not typing
- You may find a wrist rest helpful
- Do not overstretch your fingers.

3

Your screen

- Your eyes should be at about the same height as the top of your screen
- Position your screen so that only slight movements of the head are needed to see it
- Adjust your screen's brightness and contrast to suit you
- Adjust your screen to find the most comfortable position and to minimise reflections
- If necessary, change the screen position at different times of the day to suit the lighting
- If the display is unclear, change the display settings rather than bringing the screen closer

2

Your Mouse

- Place your mouse close to one side of the keyboard
- Relax your wrist and keep it straight to avoid tension
- Try not to leave your hand on the mouse when you're not using it

4

Your chair

Your chair should be comfortable and should swivel to minimise unnecessary twisting.

If other people use your workstation, adjust the chair to suit you before starting work.

- Adjust the height of your chair so that your lower arms are horizontal when typing
- Your eyes should be about the same height as the top of the screen
- Your feet should be flat on the ground. If your feet do not touch the ground, use a footrest
- If possible, adjust the chair so that the backrest supports your lower back.

5

Your sitting position

Sitting incorrectly can cause discomfort and pain.

- Sit at the correct height. Sitting at the wrong height will force you to type with bent wrists or in a hunched position. This may cause discomfort in your wrists, arms, shoulders, neck or back
- Sit in a position which you find comfortable, but change your position often to avoid discomfort
- Don't slouch or perch on the edge of the seat. You will not get any support from the backrest
- Avoid unnatural twisting or bending. This could cause muscle pain
- Avoid repeated stretching to reach things.

6

Your work area

Do not store equipment under your desk. This will cause you to bend and stretch, which could lead to discomfort and backache.

- Make sure you have sufficient space around your desk to move and vary your position
- Ensure that there is enough legroom under your desk
- Put your office equipment within easy reach; you shouldn't have to stretch to pick up your phone or reach to pick up a pen.

Working from Different Locations

If you are a WCC employee, then you need to follow the information within this e-learning module to ensure that each time you use a workstation it is setup suitably for you. This must be done before you start work.

Follow the instructions on the diagram below to set up your work station



This can be used as a quick guide for when you are working away from your normal location

Display Screen Equipment Quick Workstation Set-up Guide

This is the 1st step

Set up your chair to suit you! Ensure your arms are horizontal in the normal typing position with your elbows at a 90° angle. Use the desk to support your lower arm and wrist when typing or using the mouse.



The top of your screen should be about level with your eye line. Your screen may be slightly above or below your eye level dependant on your typing ability and comfort.



Your screen should be approximately your arm's length away (if you were to reach out in front of you).



Your keyboard and screen should be directly in front of you to avoid unnecessary twisting, stretching or awkward postures.



Try to avoid glare and reflections when positioning the monitor.



Avoid stretching to reach the mouse, keyboard and phone. They should be close to you.



Ensure your back is supported upright, with the spine's natural 'S' curve maintained (i.e. your lower back is supported). Use the levers to adjust the back rest and seat pan as required.



Ensure your thighs are slightly angled downwards with some space directly between the back of the knee and the front edge of the seat pan.



Feet must be flat on the floor or on a foot rest.



Make sure there is space under the desk to move freely and sit comfortably.



Using Mobile Technology

Using portable communication devices such as smartphones can lead to aches and discomfort due to the posture you may adopt to use them. To minimise problems, consider the following:

- Do you need to send an email? Could you call instead? This would reduce typing
- When typing hold the device upward to prevent the bending of the neck
- Change the font size to suit you!
- Use a PC or a laptop if you need to input lengthy information
- Vary the use of fingers / thumbs you use
- To relax your eyes, regularly look away from the screen.



Being Proactive



Looking after yourself at Work

The person who is best placed to determine whether you are comfortable in your work environment is you. If you are feeling discomfort and are struggling to set up and maintain a comfortable position, take a moment to think about why this is. Do you need to adjust your posture, or perhaps the height of your chair?

Which of the following are things you can do at work to avoid health and safety issues with DSE?

Which of the following are things you can do at work to avoid health and safety issues with DSE?

- ☐ Check that your desk is at the right height
- ☐ Do occasional exercises at your desk
- ☐ Ensure you have a chair that is suitable for DSE use
- ☐ Change your posture from time to time
- ☐ Take frequent short breaks

Go to the next page to find out the answers

The correct answers are:

All of them!



Keeping on the Move

If you find that you're getting achy or stiff and you're sure there's nothing wrong with your workstation setup, it may just be that you have been sitting in the same position for too long. It's vital that you get up and move around from time to time to give your body a chance to loosen up and give your circulation a boost.



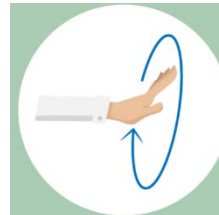
Roll your shoulders to release tension.



Tilt your head gently from side to side to loosen and stretch neck muscles.



Hold your arms out to the side and make circles with your fingertips to stretch and loosen your forearm muscles.



Rotate your hands clockwise and anticlockwise to flex your wrists.



Alternately clench your fists and stretch your hands wide a few times to flex your fingers.



Turn your head from side to side to loosen tension at the back of the neck.

Help yourself

There are lots of things you can do to promote your own health and safety - and your general level of comfort - at your workstation.

Take a break

We've seen how important it is to take breaks from using your display screen equipment. Try these tips to build breaks into your working day:

- Plan your work routine so that DSE work is mixed with non-DSE work e.g. going to the photocopier
- Avoid using phones or other electronic devices during your lunch break, think about going outside for fresh air.
- Remember to take your breaks.

If you wish to have an eye or eyesight test, you must request one via your manager by completing the WCC 'Request for a DSE eye and eye sight test form'. Once processed, you will be provided with a corporate voucher for Specsavers. This voucher can be used at any Specsavers branch and will entitle you to a free eye and eye sight test for DSE.

You are entitled to eye and eyesight tests:

- If you are a Defined DSE-User and request one
- At regular intervals thereafter. The optician will decide this but generally it is every two years
- If you suffer with visual problems which may be related to DSE work in the interim period between optician visits. You must speak to your manager on these occasions

Provision of Spectacles

If the optician confirms that spectacles are required for DSE use you will be able to select free spectacles from the £45 range at Specsavers. Alternatively the £45 contribution can be used to upgrade to other frame ranges. A further contribution of £20 is available if spectacles are selected from the £99 range or above thus giving a total contribution of £65. This contribution only covers spectacles that are solely and specifically prescribed for the distance the screen is viewed, at which is normally 50-60 cms.

If your ordinary prescription is suitable for DSE use you will not be entitled to any contribution / reimbursement for these spectacles.

Speak up

Finally, it's important to realise that no one else will be aware of any discomfort or concerns you may have if you don't speak up.

Speak to your line manager if:

- You experience visual difficulties or aches and pains which may be due to DSE work
- You have any concerns regarding the risks associated with DSE work
- You are concerned that any aspects of your workstation and work are affecting your health and safety
- You have difficulties using software
- Your workload makes you spend long periods on the DSE without sufficient breaks.

You can find more information in the next section



Help and Advice

You should now ensure that you set up your work station in accordance with the knowledge you have gained in this package.

All information is available on the Health, Safety and Wellbeing [intranet](#) pages and the Health and Safety pages of the [School Document Library](#). This includes the eye sight test request form, quick workstation set up guide, and workstation exercises.

If you have any concerns, please contact your manager in the first instance.

Further support can be provided by the Health, Safety and Wellbeing Service, by emailing healthandsafety@warwickshire.gov.uk or telephone 01926 476803.



What you need to do next

- You have now completed the DSE learning module. Please read through the following quiz questions to confirm your learning. Please refer back to the training as required.
- You now need to complete a DSE self – assessment This DSE assessment relates to you and how you use a workstation for your work activity. You can complete this assessment whether you have been assigned a fixed desk to work from, or whether you work flexibly (i.e. 'hot desk'). When completed a hard copy needs to be given to your line manager and they will then take any necessary actions resulting from your self- assessment.

DSE Quiz

1

Which **one** of these is the main thing you can do to help reduce the potential health risks of DSE use?

Select one:

- ☐ a. A new chair
- ☐ b. A desk lamp
- ☐ c. Work breaks (to adjust your posture)
- ☐ d. A fan

2

Which of these is **not a common** risk associated with using DSE?

Select one:

- ☐ a. Eye Strain
- ☐ b. Fatigue
- ☐ c. Musculoskeletal Problems
- ☐ d. Skin Complaints

3

Your keyboard should be placed

Select one:

- ☐ a. In front of the papers you are referring to/typing from
- ☐ b. Leaving just enough room between the edge of the desk and the keyboard to rest your hands/arms when not typing.
- ☐ c. As far from the edge as possible and close to the screen

Which of the following is good DSE health and safety practices?

4

Select one:

- ☐ a. Using the space under your desk as storage
- ☐ b. Maintaining a single sitting position
- ☐ c. Moving around occasionally to change position

5

Your **mouse** should be placed

Select one:

- ☐ a. Anywhere there is space
- ☐ b. As close to the keyboard as possible (on either side)
- ☐ c. On the desk next to you

6

You have certain entitlements under the DSE regulations. Which **one** of the following is correct?

Select one:

- ☐ a. You are entitled to a chair with arm rests
- ☐ b. You should receive training and information about the risks you might be exposed to whilst working with DSE
- ☐ c. You are entitled to 5 minute breaks every hour
- ☐ d. If you normally wear glasses, WCC has to pay for them.

Sitting correctly means:

Select one:

- ☐ a. Maintaining a correct posture for as long as possible and resting when tired
- ☐ b. Sitting at the correct height and adopting a posture suitable for the task at hand, changing periodically
- ☐ c. Adopting any position that feels comfortable at the time (e.g. slouching or perching)
- ☐ d. Sitting in any correctly set up chair that has not been adjusted by you before use

Why is it important that you participate in the assessment of your workplace?

Select one:

- ☐ a. To ensure that you can be properly insured
- ☐ b. To save other people time
- ☐ c. To identify problems that you may have

8

9

When are you entitled to an eye test from your employer (WCC)?

Select one:

- ☐ a. When you move from a job where you use DSE to a job where you don't
- ☐ b. At six-monthly intervals
- ☐ c. When you are a Defined DSE User
- ☐ d. Annually

10

Which of these is **not** a consideration for safe DSE use in your working environment?

Select one:

- ☐ a. Provision of recycling bins
- ☐ b. Glare
- ☐ c. Lighting
- ☐ d. Space

Go to the next page to find out the answers

The Correct Answers:

- 1) C
- 2) D
- 3) B
- 4) C
- 5) B
- 6) B
- 7) B
- 8) C
- 9) C
- 10) A

