Display Screen Equipment (DSE) Guidance

There are various elements and requirements of The Health and Safety (Display Screen Equipment) Regulations 1992.

These include undertaking a workstation assessment, setting up your equipment and getting a DSE eye test.

All of these are designed to protect the health of people who work with Display Screen Equipment (DSE). That does not mean that DSE work is risky – it isn't, if the user follows good practice like setting up their workstation well and taking breaks during intensive work.

Who do these rules apply to?

All Lincolnshire County Council (LCC) employees within scope of the Health and Safety (Display Screen Equipment Regulations) 1992, i.e. those employees (including temporary and casual employees) who habitually use DSE as a significant part of their normal work.

Why do we need to do this?

The objective of this guidance is to ensure that you identify measures necessary to control the risks to health and safety from working with DSE through assessment, guidance, information and training.

Who is a 'DSE' User?

The regulations define an employee to be a "DSE user" if they -

• normally use DSE for continuous or near-continuous spells of an hour or more at a time (this includes PPA time)

• use DSE in this way more or less daily

• have to transfer information quickly to or from DSE

How do we meet legislation?

The first step is to complete a DSE Workstation Assessment to assess and reduce risks.

This involves looking at the whole workstation:

· The equipment

· The furniture

· The working environment

It also involves looking at factors specific to the individuals using the equipment, including their views.

The assessment will identify any issues or concerns, what actions are required, who is responsible for undertaking these actions and recording when these have been completed.

The DSE Assessment

To assist you with undertaking a DSE assessment, LCC have developed an on-line assessment toolkit. The DSE Assessment for Schools form allows an employee to self-assess whether they meet the criteria of a DSE user and if so, undertake a self-assessment of their workstation(s) to evaluate it suitability and if not. This is achieved by asking the employee questions related to the equipment they use, their workstation, their work environment and eye tests, based on their answer the system will provide information and recommendation on what action(s) or equipment may be required to resolve an issue and/or make their workstation suitable. Some of these actions will be the responsibility of the employee to implement, i.e. adjusting their chair to make it comfortable, other will be the responsibility of their line manager i.e. the provision of separate keyboards or monitors etc.

Once completed the employee will be able to download a copy of their DSE assessment and forward that onto their line manager as proof a DSE assessment has been completed and more importantly make them aware of any action(s) or equipment that are required.

The DSE assessments are saved centrally within LCC and are administered by the Corporate Health & Safety Team, and it's recommended that these are repeated **every 3-4 years** as minimum or sooner if there are any significant changes to an employee's workstation, location, equipment or health i.e. back pain, headaches become pregnant etc.

Please click **here** to access the DSE Assessment for Schools form.

As a minimum (for an average, low risk employee) we should provide…

· Suitable workstation, e.g. desk / workspace

· A laptop riser, a separate monitor would be 'gold' standard

· A suitable chair, adjustable height, castor feet, lumbar support

· Separate mouse and keyboard

· A desk lamp or blind if they have problems with lighting / glare

DSE eye tests and glasses for LCC maintained school's employees

DSE eye tests

As a DSE user you are entitled to a free DSE eye test, this will normally be undertaken by a regular high street optician i.e. Specsavers. The employee can have a basic eye test (approx. £20-£30) keep the receipt and then reclaim the cost of that eye test via the Business World expenses system. When making a claim for eye test you'll need to select the 'eye test for schools' option within the reason for expenses claim drop down list.

DSE Glasses

Costs of eye tests and if required, glasses can be reclaimed via the business world portal by employees. These costs will be taken from the relevant schools budget that the employee works for.

Only the costs of the cheapest frame and lens combo that have been prescribed for the sole use of DSE use can be claimed for. If an employee already wears glasses for daily activities, i.e. reading, writing, driving etc. And that prescription is also suitable for their DSE use, then NO money can be claimed towards the costs of those glasses. For example:

Employee 1 – has an eye test and the optician identifies that they need to wear a specific prescription then operating DSE and they do not wear glasses for any other reason. The optician gives 2 quotes, one for a basic/cheapest frame and lens combo for £75 and a second one for designer frames and anti-glare coating on the lens for £200.   Because the employee needs specific prescription for DSE use they will be entitled to claim costs back, the maximum they will be allowed to claim back is the costs of their eye test + a maximum of £75 towards the cost of their glasses.

Employee 2 – has an eye test and the optician identify they need a specific prescription of DSE use, they already wear glasses for reading, but that prescription is different to the specific one needed for DSE use. The optician provides several options/quotes, one for a basic/cheapest frame and lens combo with the DSE prescription for £80 pounds or the option of having a new single pair of glasses with vary focal lens which will do both their reading prescription and DSE prescription in one pair of glasses for £255. The maximum the employee will be able to claim is the full cost of the eye test and £80 towards the cost of their glasses.

Employee 3 – has an eye test and the optician confirms they do need glasses for some daily activities i.e. reading, writing, driving etc. They also confirm that the prescription they need for these daily activities is also suitable/the same they require for using DSE. The optician quotes £220 for the pair for glasses and lens the employee selects. In this situation the employees would only be able to reclaim the full cost of the eye test and nothing towards the cost of the glasses because no specific prescription is needed for DSE use, they normal daily prescription is suitable for DSE use.

Planned breaks or change of activity

The need for breaks depends on how intensely and for how long the individual has been using DSE. The guidance on the Regulations explains general principles, for example short, frequent breaks are better than longer, less frequent ones. Ideally the individual should have some discretion over when they are taken but a good rule of thumb is to take a 5-minute break, from DSE work, every hour.


Laptop Computers

More staff are now being issued with laptops because they allow a more flexible approach to work. However, the compact design features of laptop computers, (like small keyboards and pointing

devices and a lack of keyboard/screen separation) can make prolonged use uncomfortable unless steps are taken to avoid problems.

It is best to avoid using a laptop computer on its own if full-sized equipment is available. Like other computer users, those who habitually use a laptop computer should be trained how to minimize risks. This includes sitting comfortably, angling the screen so it can be seen clearly with minimal reflections, and taking frequent breaks if work is prolonged. Wherever possible, laptop computers should be placed on a firm surface at the right height for keying.

Where laptops are used for significant periods and an analysis of the workstation must be carried out to assess and reduce risks in the same way as for desktop computers. The furniture for a laptop will be the same but to meet the minimum requirements a full-size keyboard and mouse should be made available.
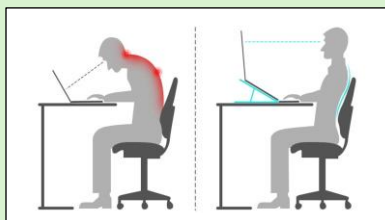

Depending on the individual and the workstation analysis other items may be necessary to reduce the risks e.g. docking stations or adjustable monitor stands to raise the screen to a comfortable level. In some cases, depending on the type of work carried out, larger screens may be necessary to accommodate the data fields required at a reasonable viewing size.

Good seating and posture for typical office tasks

1.Seat back independently adjustable for height and for tilt, and chair arms dropped

2.Good lumbar support

3.Seat height adjustability

4.No excess pressure on underside of thighs and backs of knees

5.Foot support if needed

6.Space for postural change, no obstacles under desk

7.Forearms approximately horizontal–elbows at 90 degrees, shoulders relaxed

8.Minimal extension, flexion or deviation of wrists

9.Screen height and angle should allow comfortable head position

10.Space in front of keyboard to support hands/wrists during pauses in keying
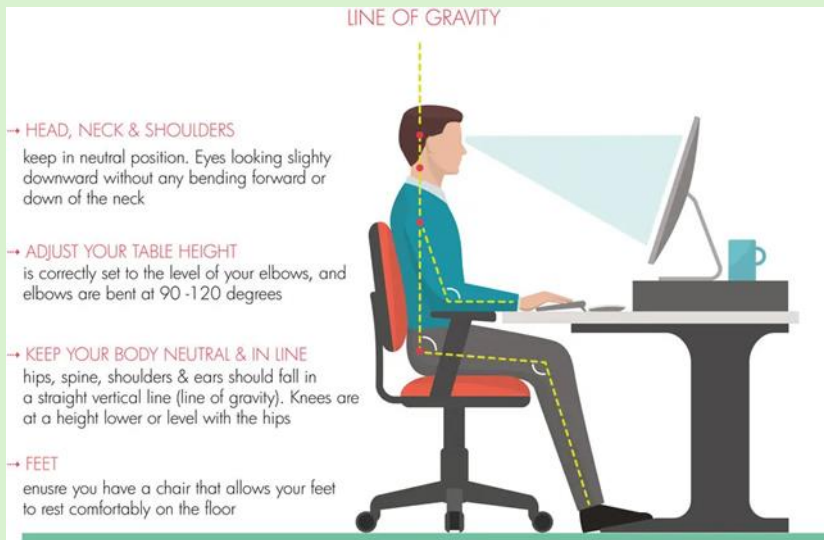
Example of incorrect and correct mouse position (i.e. arm too straight)
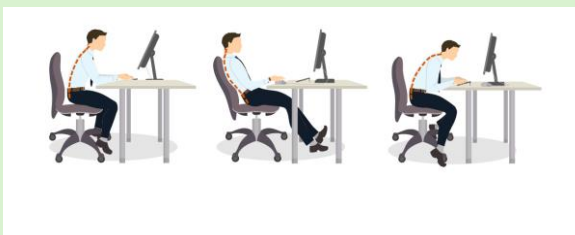
Bad seating and posture

By contrast, the following positions may contribute to long-term physical conditions, e.g. repetitive strain injury, carpal tunnel syndrome, as indicated by the red zones.

Ensuring that your desk is correctly set up will help to avoid various long-term occupational issues, such as repetitive strain injury and carpal tunnel syndrome.

Examples of equipment you may use and need

Screens

Reflections and glare can be irritating and uncomfortable on the eye but can also affect posture as you bend or twist your neck to 'see around' the reflection. Wherever possible, your screen should be placed at right angles to windows to avoid direct reflection or background glare i.e. not facing or backing onto a window.

As a rule of thumb, the top of the screen should be about eye level; however, you may need to adjust this if you are a non-touch typist, or you wear bifocal or vary-focal spectacles.

Do you have any obstructions i.e. bins or boxes that restrict your movement? Are all cables secured safely? Confirm there are no cables draped loosely under the desk. Confirm there are no cables unprotected on the floor.

A Mouse

Intensive use of a mouse, trackball or similar pointing device may give rise to aches and pains in the fingers, hands, wrists, arms or shoulders. This can also happen with a keyboard. Most mouse work concentrates on activity on just one hand and arm (and just one or two fingers) and this intensity may make problems more likely to occur.

Risks can be reduced by adopting a good posture and techniques, i.e.

- Place the mouse close to you, so that it can be used with a relaxed arm and straight wrist without over-stretching and adjust the position of your keyboard to ensure you have support during pauses between keying.

- Support your arm on the desk or armrests of the chair. Do not over-reach.

- Don't leave your hand on the device when it is not being used.

- Take frequent breaks and short pauses.

- Use good keyboard techniques: wrists straight, a soft touch on the keys and do not overstretch your fingers.


If you have tremors in your hand or finger problems, a stationary mouse is the best option. However, if you are still finding the mouse awkward, there are alternative shapes and sizes, or even an alternative device such as a trackball mouse.

A **roller mouse** is good for neck and shoulder issues.

A **vertical mouse** is more effective generally than a mouse mat and keyboard rest (as users tend to swivel their wrists). If possible, trial one before purchasing.
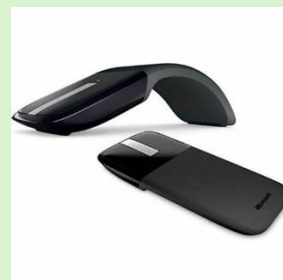
The **Microsoft Arc and cordless Trackman optical** are types of mouse that allows the hand and wrist to work in a more natural position
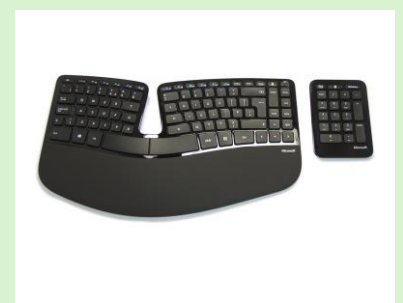
A **mouse bean** provides good wrist support and is very useful if the user has carpal tunnel syndrome.

Keyboards

Is your keyboard separate from the screen and does your keyboard have a matt surface, legible symbols, an appropriate layout and sufficient space in front of it?

Do you experience aches or pains in your hands, wrists and arms whilst using your keyboard?

Tips

- Try pushing the display screen further back to create more room for the keyboard.

- If you have a raised, thick keyboard, a wrist rest may help.

- When typing, aim to avoid:

- bending your hands at the wrist

- hitting the keys too hard

- over-stretching your fingers

Good keyboard technique is critical. When typing, your forearms should be parallel with the desktop and roughly level with the top of the keyboard. There should also be room to rest the hands when not typing.

There are an increasing number of **ergonomic keyboards** on the market, and also **left-handed keyboards**.

You may need to consider a **document holder** and/or **writing slope** combined, e.g. a Multirite.

Chair Selection

Managers are responsible for the ordering/purchasing individual equipment for staff where a requirement been identified via a Workstation/Display Screen Equipment (DSE) assessment or an Occupational Health (OH) referral report.

This section is designed to help managers identify possible equipment that may resolve some of the problems employees have identified or where recommendations have been made.

Chairs are available via the Office Update contract, each offering various levels of support to meet differing needs of the individual. The contact at Office Update is Gavin McAndrew on 0116 2223636 or on his mobile: 07852 27 8318. Please ensure you ask Gavin to arrange to set up the chair when he delivers, so you will need to make sure the person for whom the chair is intended is available that day.

Cambridge Posture Chair

Suitable for most users.

Adjustable seat height.
Adjustable seat tilt.
Adjustable back height.
Seat slide for tall users (i.e. those over 6ft) or those with longer thighs/legs.
Inflatable lumbar pump.
Foldaway height adjustable arms.

Posturemax 200 Chair

Suitable for users up to 200kg/31 stone.

Adjustable seat height.

Adjustable back height – enables lumbar support to be positions where it is required.

Heat reactive memory foam in seat and back, i.e. body warmth enables the foam to mould to the shape of your body.

Seat slide for tall users (i.e. those over 6ft) or those with longer thighs/legs.

Adjustable arm rests (not foldaway).

Optional headrest (N.B. please note headrests are not generally required for general DSE use as it can push the user's head forward and put pressure on the neck. Neck rests are useful to support users in roles that involve looking at wall-mounted monitors, e.g. security guard.)

Inflexion Posture Chair

Suitable for taller individuals (over 6ft 2), those requiring significant lumbar support, including, for example, pregnant individuals (source: Office Update)

Adjustable seat height.

Adjustable back height.

Contoured back for added support plus inflatable lumbar support and large deep cushioned seat.

Seat slide for tall users (i.e. those over 6ft) or those with longer thighs/legs.

Foldaway height-adjustable arms.

Optional headrest (N.B. please note headrests are not generally required for general DSE use as it can push the user's head forward and put pressure on the neck. Neck rests are useful to support users in roles that involve looking at wall-mounted monitors, e.g. security guard.)

Scultp Chair

Suitable for petite users (5ft 2in and under)

Adjustable seat height.

Adjustable back height.

Features a smaller seat and smaller back rest.

Deeply-contoured back for added lumbar support.

Foldaway height-adjustable arms.

Independent seat, seat tilt and backrest angle adjustment.

Optional lumbar pump.

Mesh Chair

Suitable for individuals who need a chair that supports air circulation to keep cool.
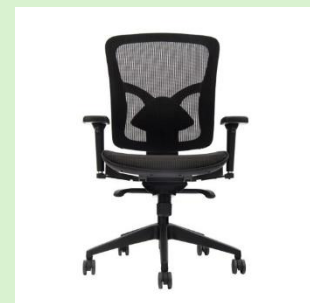
Adjustable seat height.

Adjustable back height.

Lumbar support.

Seat slide for tall users (i.e. those over 6ft) or those with longer thighs/legs.

Adjustable arm rests (not foldaway).

Leg Rest

Product Code: BCS2071-SG, BCS2071-DB

- Height and angle adjustable (the image shows the leg restfully articulated but it can be adjusted to fully horizontal
- Rotates 360 degrees
- Various height ranges are available
- Bends under the knee at the top part of the leg rest for added comfort

Available from Back Care Solutions Ltd

A Purchase Order Number must accompany all orders.


Chairs, set-up and adjustment

Did you know that there is no single correct chair that is 100% perfect for everyone? Chairs are adjustable because they allow most people to adjust them according to their own individual needs.

However, in order to make a typical office chair suitable for most people, there are some minimum criteria which should be fulfilled. For example, it should be possible, and easy -whilst seated on the chair –to independently adjust the chair's height, the position of the backrest and the seat tilt (if provided). The chair will normally have a five-point star base for stability, with either castors or gliders (which should be chosen according to the type of floor covering).
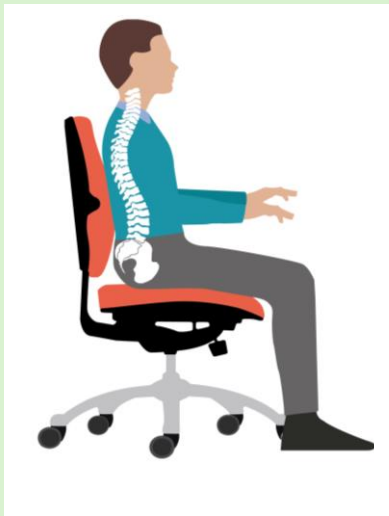
Tips

The height of the chair should be adjusted so that your hands and forearms are parallel to the desk, and the keyboard at about elbow height. If your feet do not rest comfortably on the floor, then a footrest is necessary. The backrest of the chair should be adjusted to support the lumbar curve with your shoulders relaxed.
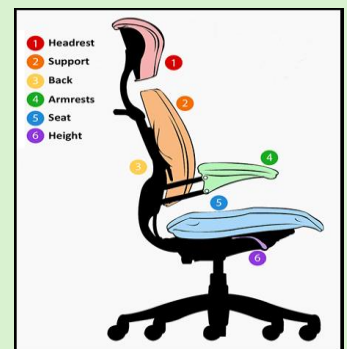
Seating and posture for typical office tasks

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5. Foot support if needed
6. Space for postural change with no obstacles under desk
7. Forearms approximately horizontal – elbows at 90 degrees, shoulders relaxed
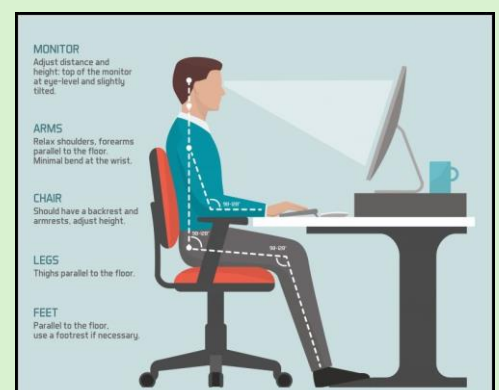
8. Minimal extension, flexion or deviation of wrists
9. Screen height and angle should allow comfortable head position
10. Space in front of keyboard to support hands and wrists during pauses in keying

The Use of Smartphones and Tablets

The use of tablets, smartphones and other mobile devices in the workforce has increased exponentially over the past few years, yet the long-term associated risks are still largely unknown.

Short-term effects are known to include neck pain -from heads being tilted at an uncomfortable angle-and muscle fatigue from arms being outstretched for extended periods whilst waiting for screens to load. Muscle fatigue is also a risk for those who have difficulty in viewing small screens, and who therefore hold them at arms' length for extended periods of time. It is possible that longer-term effects of using mobile devices will become apparent over time.

What you can do to reduce risks

- Regularly look away from the screen to relax eye muscles

- Increase font size to avoid eye strain

- Hold device at eye level to reduce neck strain, or use a stand

- Place the device on a table or surface when typing

- Vary the fingers you use to input data

- Use an external keyboard –or switch to a PC or laptop -when inputting large amounts of data or typing for a lengthy period of time

- Regularly change position and stretch

Exercise & Wellbeing for desk-workers

It is important for keyboard workers to avoid back pain, and to minimise the effects of repetitive keyboard work. In addition to making sure your seating arrangements and desk top ergonomics are correct, the following exercises -performed from a seated position -are useful in maintaining suppleness and reducing aches and pains.

Keyboard User Exercises

Remember that it is important to take regular short breaks from your work, and to change position from time to time, in order to prevent aches and pains from developing.

Finger Fan

Hold the hands out in front and spread the fingers apart as far as possible. Maintain for the count of 5, relax and repeat.

Shoulder Blade Squeeze

Link hands behind the chair and pull the shoulders back. Squeeze shoulders together and straighten arms, hold, release and repeat.

Back and Arm Stretch

Clasp the hands together and extend the arms straight above the head. Lean to the left, then to the right and stretch hard several times

Shoulder Roll

Roll the shoulders backwards and forwards several times.

Neck Stretch

Bend the head forward and slowly turn it like a pendulum to look up to the right and then to the left. Then, with the head in a neutral position, slowly turn the head to look down to the left and to the right. Repeat several times.

Wrist Stretches

Straighten both arms out in front and, with one hand, bend the wrist of the other hand upwards and then downwards. Change hands and repeat. It is important for keyboard workers to avoid back pain.
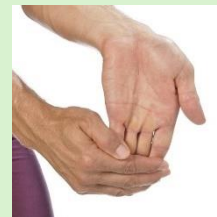
Trunk Twist

Fold the arms and twist the trunk to the left and then to the right.

Hand Bend

Place your elbows on the table and, with one hand, gently take the opposite hand and bend back towards the forearm. Repeat with the other hand.

Further Information

Health & Safety Executive (HSE)
Working safely with display screen equipment - HSE
Working with display screen equipment (DSE) Leaflet

Lincolnshire County Council (LCC)

Health and Safety for Schools Webpage

Contacts

LCC Corporate Health and Safety Team – corporatehealthandsafety@lincolnshire.gov.uk