Working safely at a computer at home

Health and Safety Issues

Main health problems are Musculo Skeletal Disorders – sometimes called RSI- Repetitive Strain Injury, WRULDs- Work Related Upper, and Lower, Limb Disorders, basically pains in fingers, hands, wrist arms, shoulders, neck, back and legs. May start as slight pains that go away when stop working which may be reversible, but if continue they may become more severe, persist after stop working and can become permanent and disabling. MSDs are mostly caused by having to hold your body in a fixed awkward posture, and work for too long at poor workstations and can develop after a short period of intense working.
Stress – headaches, muscle tension, depression and anxiety due to excessive workloads, lack of support, poor software, hardware, unreasonable targets, surveillance and monitoring, isolation, and also having to do paid work while home schooling, caring for others at home.
Eye problems – blurring, temporary double vision caused by poor siting and lighting of computer creating glare and reflection, plus also uncorrected eye problems, and excessive working hours looking at computer screen.

The biggest problems are caused by having to work for too long at a lap top where screen and keyboard cannot be separated, and/or at a computer at table and chair that are not the right height with poor lighting and siting, inadequate hardware and software. Add in the stress of overwork, lack of support, or trying to multi task while also home-schooling or looking after children and adults in your own home, having to dismantle your workstation so table can be used for other purposes, and set it up again repeatedly. Stress can cause muscular tension and pain and together with poor workstation exacerbate MSDs.
Many people do not have suitable desks or table at home, or separate area that can be set up solely as a workstation
The law on Display Screen Equipment link does say you need an adjustable chair but not an adjustable desk, but is based on office desks which are generally lower than dining room/kitchen tables which are usually too high. Pandemic lockdown occurred fast and it might be reasonable that your employer was unable to provide all the equipment needed for safe workstation immediately. It is now over two months later and with homeworking likely to continue and it is reasonable for your employer to provide essential equipment to prevent risk to your health safety and welfare.

Ask your employer for
- an adjustable chair
- a means of ensuring that screen and keyboard on laptop can be separated – via a docking station or separate keyboard. Lap-tops should be used only for very short periods where portabilty is necessary.
- some form of adjustable desk or device that enables the adjustment of the height of screen and of the separate keyboard to help establish a good optimum working position.

How to achieve as good and safe a working position as possible

Many workers do not have the right equipment and have to make do with what they have which is often inadequate.

i) **What you need to set up a safe working position**- see Figures 1 and 2 form HSE Display Screen Equipment Regulations:
- an adjustable chair – or a chair that can be adjusted to right height - with good lumbar support
- a desk/table at right height or some means of adjusting height
- a computer with separate screen and keyboard
- enough space to set up a computer in good working position
- depending on what work you do you may need document holder and lamp, extra space around computer for your papers, printer, scanner, phone etc. If you are on the phone a lot, have to do online meetings then you will need a headset with microphone compatible with your equipment and good broadband/wifi and all the required software training and back up IT support.

i) **Set up your computer in best position -**see Fig 1
Put your computer on a table/desk so that you are not facing the window or sitting with your back to the window. The computer should be right in front of you at right angles to window to minimise glare and reflection on the screen, and also strain on the eyes. Window needs blinds or curtains to control light.

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Source:
Health and Safety Executive

Window to one side, no in front of you or behind you.

May need document holder and desk lamp

Keep mouse very close to body so that arm is under strain
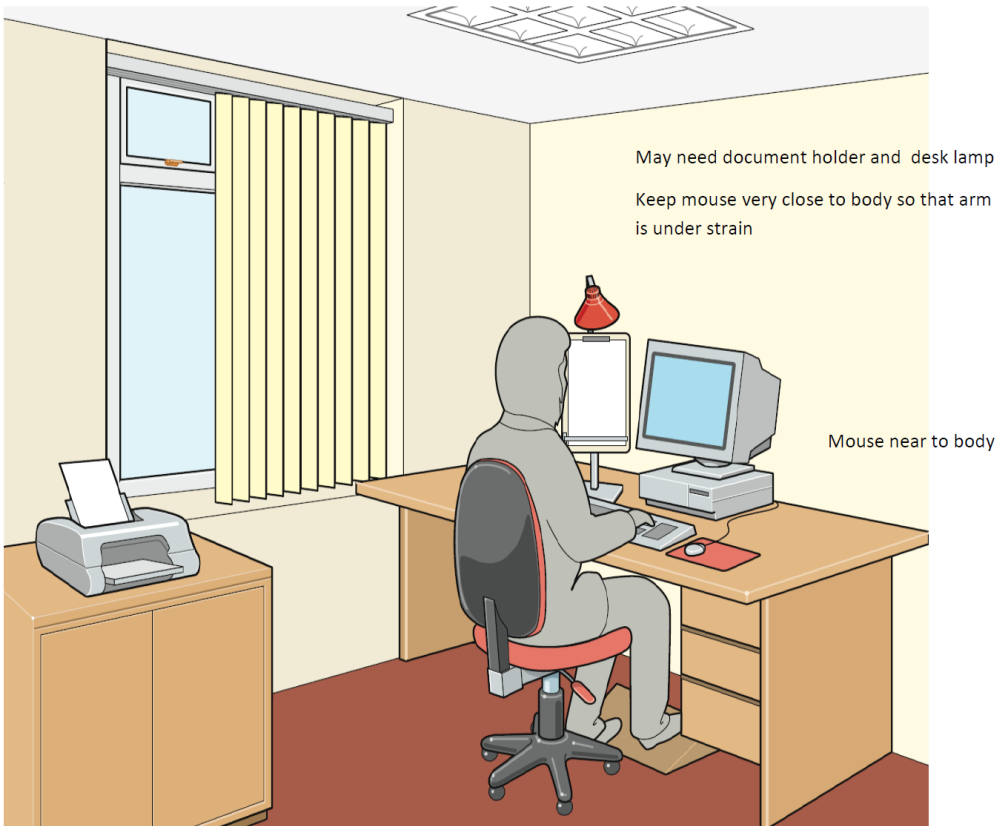
Mouse near to body

Figure 1 Subjects dealt with in the Schedule

- Adequate lighting
- Adequate contrast, no glare or distracting reflections
- Distracting noise minimised
- Leg room and clearances to allow postural changes
- Window covering if needed to minimise glare
- Software: appropriate to task, adapted to user, providing feedback on system status, no undisclosed monitoring
- Screen: stable image, adjustable, readable, glare/reflection-free
- Keyboard: usable, adjustable, detachable, legible
- Work surface: with space for flexible arrangement of equipment and documents; glare-free
- Chair: stable and adjustable
- Footrest if user needs one

ii)   The position you are aiming for- see Fig. 2:

- Back straight, sitting with bottom at back of seat, not perching, supported in curved lumbar region of back by the curved part of adjustable chair, or by pillow at an ordinary dining room chair.
- Head upright over spine, not leaning forward, so that neck and shoulders are relaxed, not hunched, under no strain
- Eyes looking straight ahead at height of top of the actual screen so that your gaze can fall down over screen without having to bend your head forward
- Shoulders relaxed not hunched up, not lifting your forearms higher
- Arms should be bent at elbow in relaxed right angle with forearms horizontal (parallel to floor) and hands should be hovering over the keyboard, not resting on desk or arms of chair
- Hands should be in line with your arms, not bent up or down at the wrist
- Feet flat on floor- not curled round chair legs or dangling- to support legs, with thighs horizontal (parallel to floor) or slightly pointed downwards, to prevent excessive seat pressure on thighs behind knees which impedes blood flow from

feet and legs back to heart.

Head supported right over spine

Eyes level with top of actual screen. About 1 metre from eyes

Shoulders relaxed, not hunched up to raise arms

Screen may be tilted for most comfortable view

Arms relaxed, hanging downwards pointing at floor, then bent at elbow in relaxed right angle

Screen placed in books, reams of paper, box to achieve right height for eyes

Sit upright, bottom at back of seat, lumbar area—curve in spine- supported by curved back of chair. – adjust seat back to get it right.

Unadjustable chair - use a pillow

Keyboard can be flat or angled for comfort

Forearams horizontal, hands in line with arms, not flexed up or down at wrist. Hands hovering over keyboard

Lap top must have docking station or separate keyboard to achieve the best position

Thighs horizontal or slightly pointing downwards

Feet flat on floor supporting knees preventing pressure on underside of thighs

Adjust height of chair seat to get forearms in right position for keyboard. If feet now not flat on floor and supporting legs.

Non –adjustable chair and seat too low to get arms in right position, add firm, stable cushions and provide foot support .

Only use foot rest if cannot achieve position without it . Use wedge shape, lever arch file works

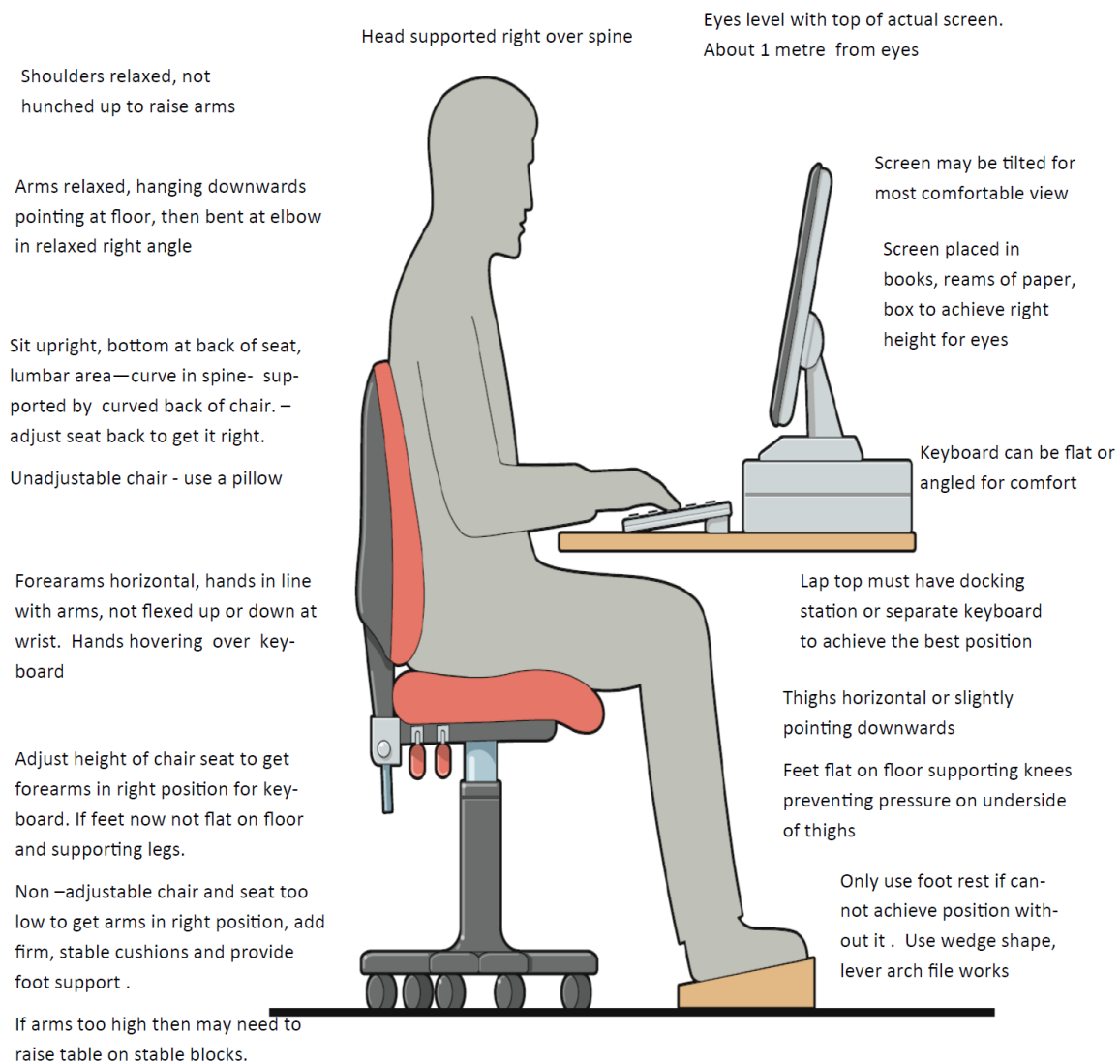If arms too high then may need to raise table on stable blocks.

Figure 2 Seating and posture for typical office tasks

- Seat back adjustable
- Good lumbar support
- Seat height adjustable
- No excess pressure on underside of thighs and backs of knees
- Foot support if needed
- Space for postural change, no obstacles under desk
- Forearms approximately horizontal
- Wrists not excessively bent (up, down or sideways)
- Screen height and angle to allow comfortable head position

iii) **Try it, sit down at the table/desk in front of your computer keyboard and see how close you come to this position.**

If you can achieve this position naturally this is brilliant, if not you have to make adjustments.

iv)   Adjusting your equipment to get the best position

- Place keyboard on table and sit on chair in front of it.
  Ensure your back, legs and feet are in the position described above and shown in Fig 2. If possible get someone to look at your position and compare with the diagram. You may need to get someone in the household to help you check your position and measure distances.

- If your forearms are too low then you need to either raise the position of your chair seat, or lower the height of the table/desk but this is impossible with a non-adjustable table.
  If your forearms arms are too high them you need to raise the table/desk the keyboard is on and you could do this by placing blocks under the leg but ensure it is done in safe and stable manner.

- If you have an adjustable chair, then raise your chair seat using the lever.
  If not then you need to add firm cushion(s) to the seat until your arms are at the right height.
  To help, measure the difference between the position of your arms as they are, and where they should be, and the difference is the approximate thickness of the cushion you will need to sit on to raise your arms to the right level. Having someone to measure while you adopt the position helps, otherwise it's trial and error. Make sure your legs are not squashed up- against the underside of the table.

- Adjust the height of seat back so that the curved part fits not the curved lumbar region of your back. If you do not have adjustable chair then use a pillow. Make sure the support is in the curved area of your spine not too low or this will add to MSDs problems.

- Your feet may now not be flat on floor so add a foot-rest - a wedge shape like a lever arch file works well.

- Once you have the right position of your arms to bring your hands hovering over the keyboard, then adjust the height of the screen.
- Your eyes should be looking straight ahead level with the top of the screen, not the border. It may be helpful to measure this and have someone check your position while you are sitting at the computer
- The screen should be about 1 metre from your eyes – arms length and a bit more.
- If the screen tilts then you may want to adjust it until it is comfortable.
- Your head should remain above your spine, eyes looking straight ahead with gaze failing down across the screen.

- If you have a mouse make sure it is close to your body so you do not put strain on your arm,

The more difficult it is to adjust your position to get it right, the longer it will take if you have to clear your equipment away to allow other family activities. If at all possible, try to establish a working space that can stay adjusted. If not then you must take time to get it right at the beginning of each work session.

Laptops for homeworking are not ideal, but If you have to work at a laptop temporarily then:

- try not to do it at sofa or bed as these will be worst for your posture.
- raise lap top so screen height is as near to the position described above as possible so that your do not put strain on your back, neck and shoulders by having to lean head forward.
- use firm surface to rest laptop – try angling it using lever arch file or chopping board.
- if you have no table then try kitchen counter or ironing board and stand up
- or sit on floor and put laptop on coffee table or sofa, balanced properly on books etc to make it high

Ok now you have the optimum or at least the best position you can achieve without the right equipment and so you can happily work all day without problems? Wrong! You must take breaks, move away from looking at the screen to give your eyes a rest and blink more, and make big movements with your back, shoulders and arms.

- The legal guidance says 5 minutes break every 50 mins, but at an unconventional workstation you need to take more care and more breaks. so 5 minutes every 25 mins at least. The further away from good position you are working, the more breaks you must take to prevent MSDs . Begin taking breaks after the first 25 mins or less, as a break taken before you feel tired is worth far more than the ones you take when already tired or feeling the strain.

- Take longer break every 2 hours or so and try stretching the muscle in your lower back by lying on floor with legs at 90 degrees pointing at ceiling
- Move around as much as you can when using phone, during breaks try running and down your stairs.
- Drink plenty of water – you have to fetch it and go to toilet more so gets you away from computer.
- Take a full lunchbreak away from the computer, get outside if you can to get daily dose of Vitamin 4 which is important in immunity..
- Set times to work and separate from rest of your day by going for walk outside, or do other exercise especially stretching exercises
- Talk to friends, work mates in online meetings or chat groups – try not to get isolated
- If you need more support then ask for it from employer, supervisors or union safety rep
- Ensure that you agree with employer a manageable workload, and working hours, bearing in mind the quality of your workstation and all the other tasks and responsibilities you have to do
- If you are ill do not work
- Ask for proper equipment if you are going to carry on working at home, see above.

Other sources of information

HSE Work with Display Screen Equipment: https://www.hse.gov.uk/pubns/priced/l26.pdf
HSE DSE Screen Checklist: https://www.hse.gov.uk/pubns/ck1.pdf
TUC Webinar Working Safely from home
Coronavirius How to Manage your mental health while working from home
https://www.youtube.com/watch?v=dHcdlH2By14&feature=emb_rel_pause

Contact Greater Manchester Hazards Centre for more information or advice
 mail@gmhazards.org.uk; hilda@gmhazards.org.uk