

Working at home: setting up a home computer workstation

Guidance for completing the University of Bath online WFH Computer Workstation Assessment

Introduction

- Use this guidance in conjunction with the [WFH Computer Workstation self-assessment questionnaire](#) for your home computer.
- This guidance provides low- or no-cost suggestions for making your home workstation as ergonomic as possible.
- You are likely to find that there are some aspects of your home workstation that you cannot set up as ergonomically as you would have at work.
- You will need to make allowances for this and ensure that you take additional breaks to get up and move around.

Avoiding aches and pains

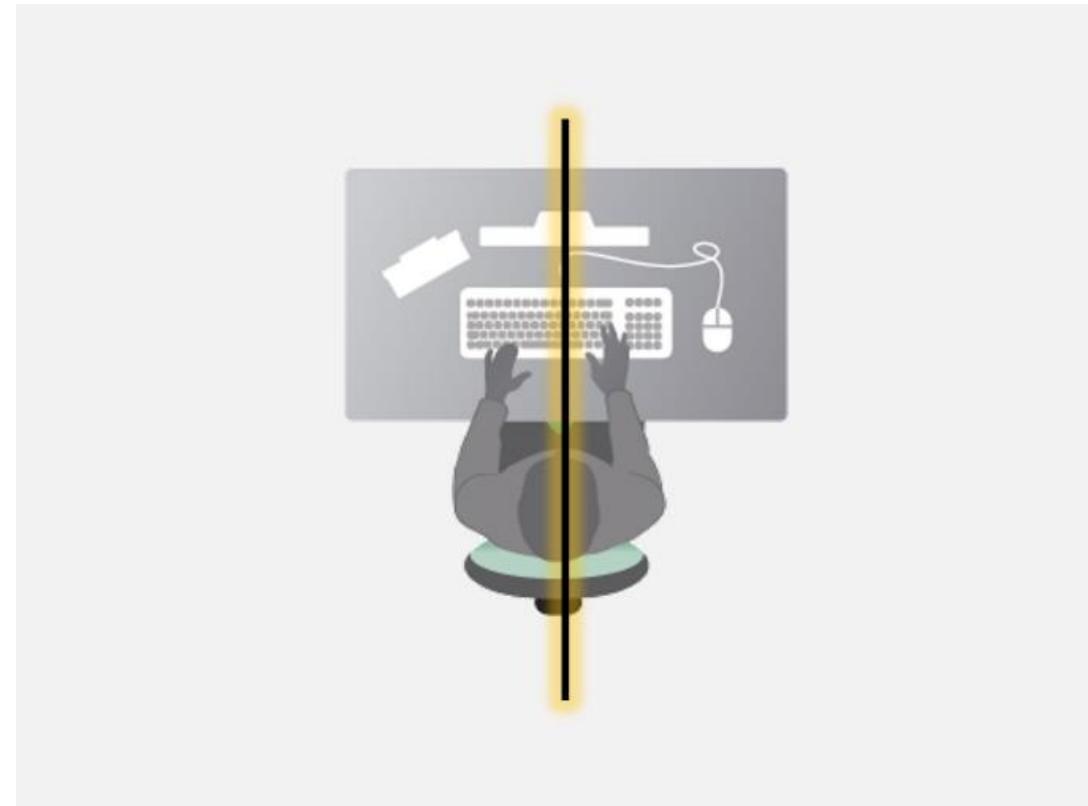
- **Using portable IT equipment (laptops, iPad, etc.)**
- For users of laptops or other portable equipment, the risk of musculo-skeletal injury is higher and increases greatly the more you use these types of equipment.
- If you are using portable equipment as your main computing equipment at home, it is vital that you are self-disciplined in how you use it. Ensure you maintain a sensible posture and take frequent breaks from using the equipment.
- If you hold the equipment in your hand, ensure that you stretch the muscles periodically to help prevent muscle fatigue and avoid the risk of 'iPad hand' (a version of trigger finger where the fingers become locked and rigid).
- **Additional guidance: What should I do about persistent aches and pains?**

Your chair

- If you have a specialist chair for work on campus, you may find that you cannot sit as comfortably at home unless you have an ergonomic or office-type chair. In this case, make yourself as comfortable as you can, and ensure that you take plenty of breaks from computer work.
- Try to ensure that your back is supported well. You may wish to try tucking a small cushion into the small of your back to provide additional support.
- If you need to sit a bit higher, add cushions to the seat.
- The Health and Safety Executive (HSE) has published a [quick-start video explanation](#) that summarises the main points for sitting comfortably at home.

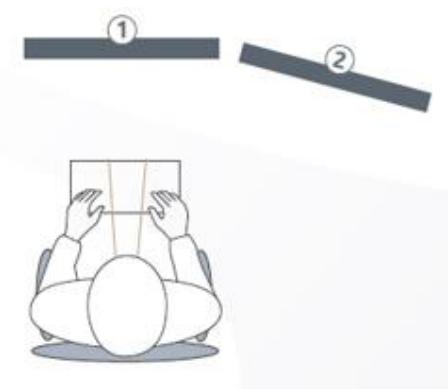
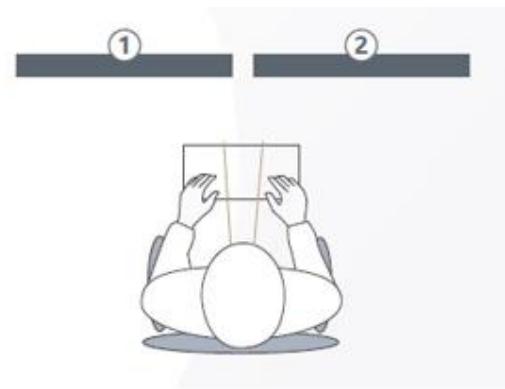
Positioning your screen/s and keyboard

- If you use a single screen, you should have your keyboard and monitor directly in front of you while you are working.
- Ideally, the tops of the screen/s should be aligned to minimise awkward head and eye movements, and you should be able to view the screen/s without having to crane your neck up or hunch down.



Positioning your screen/s and keyboard

- If you have more than one screen the layout should ensure that you are using them as ergonomically as possible.
- If you have two screens and use them both equally, position them symmetrically with a small angle between them (left image). If you use one as your main screen and one as a reference screen, have the main screen in front of you and the reference screen to the right or left at a slight angle for ease of viewing (right image).



Typing and screen viewing

- When you are sitting at the proper height for typing, you may find that your feet cannot comfortably be placed flat on the floor. If so, you will need something to rest your feet on. Try a block of magazines or a solid box if you don't have a footrest.
- When looking directly ahead, your gaze should be just at or over the top of your screen/s.
- If your screen is too low even at its highest setting, find something to raise it up, such as a pile of books or magazines.
- Slightly tilting the top of your screen away from you will help your eyes to focus more naturally as you view different parts of the screen. Position it at about arm's length away from you if possible.
- There are usually buttons (often on the underneath of the monitor) in desktop machines, or settings options in laptops, for adjusting the brightness and contrast.

Leg room

- Try to ensure that there is nothing placed underneath the work surface that would get in the way of your legs and feet. If there are items under the work surface, try to make enough space so that you can have your feet in a comfortable position.
- If your work surface is too low, see if it is possible to raise the piece of furniture safely, e.g. by putting blocks of wood under the legs.
- If you can't raise the work surface to a satisfactory height, you will need to take additional stretching breaks to avoid the development of aches and cramps.

Keyboard and mouse

- **If you are using a laptop as your main home computer,** you should use a laptop stand and a separate mouse and keyboard so that you can maintain a suitable posture and hand/finger positions. If you do not have a laptop stand, you can use a pile of books or magazines instead to raise your laptop so that the top of the screen is more at eye level.
- If you don't have a mouse and keyboard at home, you could arrange to pick up the ones you use at work.
- If you are experiencing difficulties with your mouse, the [Assistive Technology team](#) can help you choose a suitable mouse and keyboard and there is a range of ergonomic models that you can try. You should not buy ergonomic equipment without trying it first.

Using the mouse ergonomically

- When using the mouse, keep it close to you. If it is a standard mouse, keep your wrist off the desk to avoid putting pressure on the carpal tunnel (if you can't do this, your mouse may be too small for your hand).
- Use your whole arm to move the mouse, not a wrist movement. If you are unable to move your arm from the shoulder, a finger-tip motion mouse may be a better solution.
- Most modern mice don't need a mat to work - unlike the old ball-operated mice which needed extra friction to work. Most desks provide enough reflection for the low-power laser or LED that is found in newer mice.
- If you do need a mouse mat, it's usually better not to have one with a gel wrist rest. The problem with a gel mouse mat is that it's too easy to rest on the gel pad while you are moving the mouse about. This will give you less movement in your elbow/shoulder, and will lead to more rotational movement in your wrist, putting more pressure on the carpal tunnel. It's far better to have a mouse that is suitable for your hand than to rely on a gel mat to support your wrist.
- If you need to rest your wrists in between using the mouse, put your hands on your keyboard rest if you have one. Otherwise just rest them on the desk or on your lap.
- Working in this way will reduce pressure or strain on the carpal tunnel area and should help to eliminate wrist and hand pain.

Using the keyboard ergonomically

- The keyboard should be positioned fairly close to your body - with the front of it ideally about 10cm away from the edge of the desk.
- Imagine you are playing a piano - with your shoulders relaxed, lower arms level and your elbows by your sides, your fingers should be relaxed and your finger tips able to touch the keys almost without effort.
- Your wrists should not be resting on anything while you are typing.
- Standard keyboards usually have little feet underneath the back edge. For ergonomic typing, it's usually better to leave the feet retracted so that the keyboard is flat.
- Most standard keyboards have a number section at the right hand end. If you don't use this, you might wish to look at short keyboards. These allow the mouse to be positioned closer to you than is usually the case with the standard keyboard, and may help to keep your right arm more relaxed.
- If you are experiencing difficulties with your keyboard, the [Assistive Technology team](#) can help you choose a suitable keyboard and there is a range of ergonomic models that you can try. You should not buy ergonomic equipment without trying it first.

More mouse and keyboard information

Keyboard wrist rests

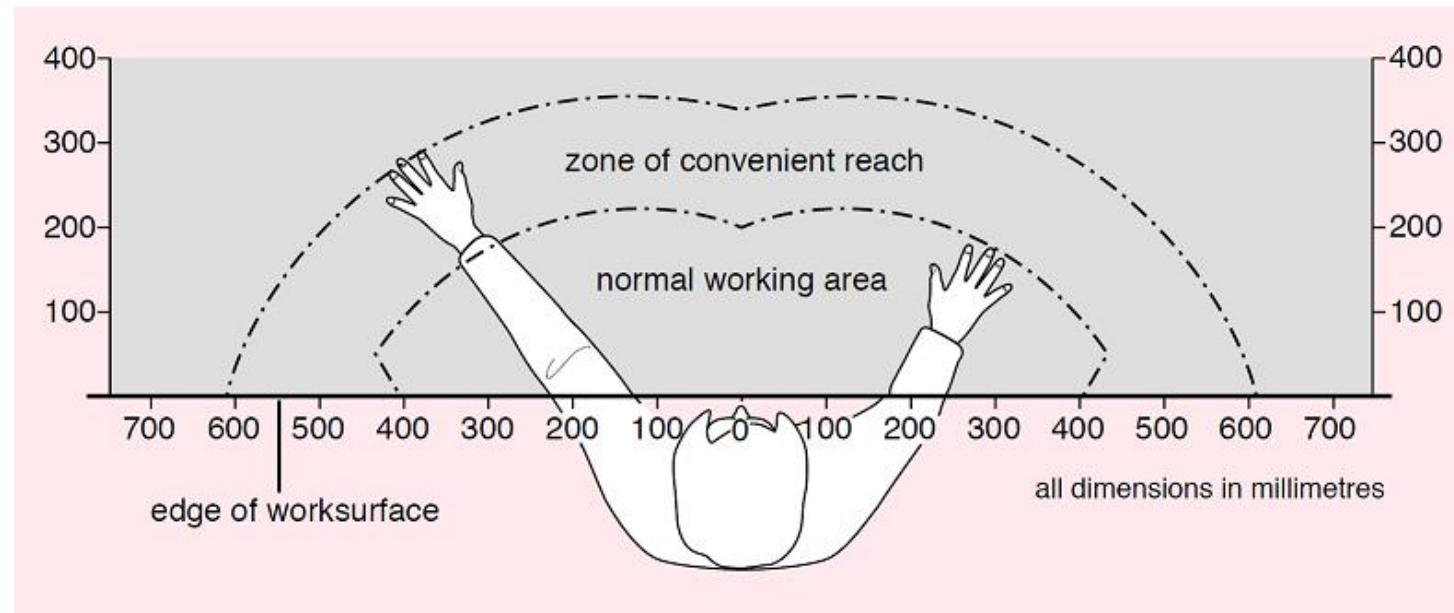
- Keyboard wrist rests are designed for resting your wrists while you are not typing. You should not rest your wrists all the time, as this constricts the movement within the carpal tunnel and can lead to RSI including carpal tunnel syndrome.
- It's better not to use a wrist rest at all, but to put your hands on your lap if you need to rest in between typing.

Ergonomic mice and keyboards

- If you need to explore the possibilities offered by special ergonomic models of mice and keyboards, contact the [Assistive Technology team](#)
- If you are unable to use a keyboard and mouse without experiencing severe pain, voice recognition software can be a way of being able to continue working. Contact the [Assistive Technology team](#) for advice.

Your work surface

- Having enough space on your desk top for everything you need for working can be a challenge when working at home.
- Think carefully about how you use the various items and try to place each one where it will be most easily in reach.
- Try to have a daily tidy-up session to avoid your precious space getting even more restricted by clutter. Don't keep any paperwork longer than really necessary.



Your working environment

- Think about the location you have chosen for your home work space. Invest time in really considering how you have set up your working space.
- There may be steps you can take to improve the lighting or to avoid glare on your computer screen, e.g. by moving table lamps or by pinning a spare sheet over the window to help lower any direct sunlight. Can you change the orientation of your workstation relative to the window?
- You might not be able to do much about any noise level or space issues. However, if you find these a problem, try to take extra breaks and perhaps try some [breathing exercises](#) to break the tension.
- Would some calming music help? Can you do some decluttering to give yourself more space?
- Could you open windows or doors to increase air flow? Conversely, if there is an unpleasant draught, try to find something to block the source, such as a rolled-up towel against the bottom of the door.

Your working practices

- **Taking screen breaks**
- It's important to be disciplined and take short breaks to rest your eyes and stretch your muscles.
- It's recommended that in general you look away from your screen for 20 seconds every 20 minutes; and that you get up and walk about for 2 minutes every hour as a minimum.
- If your home computer set-up is less than ideal, you will need to factor in additional breaks.

Taking breaks: desktops and laptops

- **For desktop users:**
 - If you can set up an ergonomic workstation that complies with all the requirements, you can work for up to an hour before taking a 2-minute break;
 - If there are one or more elements that are unsatisfactory, you should take a break after 30 minutes working.
- **For laptop users:**
 - If you can set up an ergonomic workstation that complies with all the requirements including a laptop stand with separate mouse and keyboard, and a footrest if needed, you can usually work for up to 40 minutes before taking a break;
 - If there are one or more elements that are unsatisfactory, you should take a break after 20 minutes working.

Taking breaks: tablets and smartphones

- **For tablet users:**
 - If you can set up an ergonomic workstation that complies with all the requirements including a tablet stand, and separate input tools where appropriate, and a footrest if needed, you can probably work for up to 30 minutes before taking a break;
 - If there are one or more elements that are unsatisfactory, and a footrest is needed, you should take a break after 15 minutes working.
- **For smartphone users:**
 - If you can achieve a reasonably comfortable position and hold the phone comfortably, take a break after 15 minutes of working;
 - If you cannot achieve a reasonably comfortable position or cannot hold the phone comfortably, take a break after 10 minutes of working;
 - Keep smartphone usage as low as possible and try to avoid using it for extended pieces of work.

Apps to help you remember to take breaks

- Windows users can download a little freeware programme called [BigStretch](#) that you can customise to pop up and remind you to take breaks.
- Don't worry, it won't lock you out of your computer and you can postpone the reminder if it's not convenient to stop at that time. Do make sure you aren't constantly skipping breaks!
- You will probably find that you are most likely to notice the 'intrusive pop-up' option. Other options are unobtrusive and easy to miss.
- There are other similar programmes that work with non-Windows based systems, such as [WorkRave](#) which will work for both GNU/Linux and Microsoft Windows.

Cut down on mouse use: keyboard shortcuts

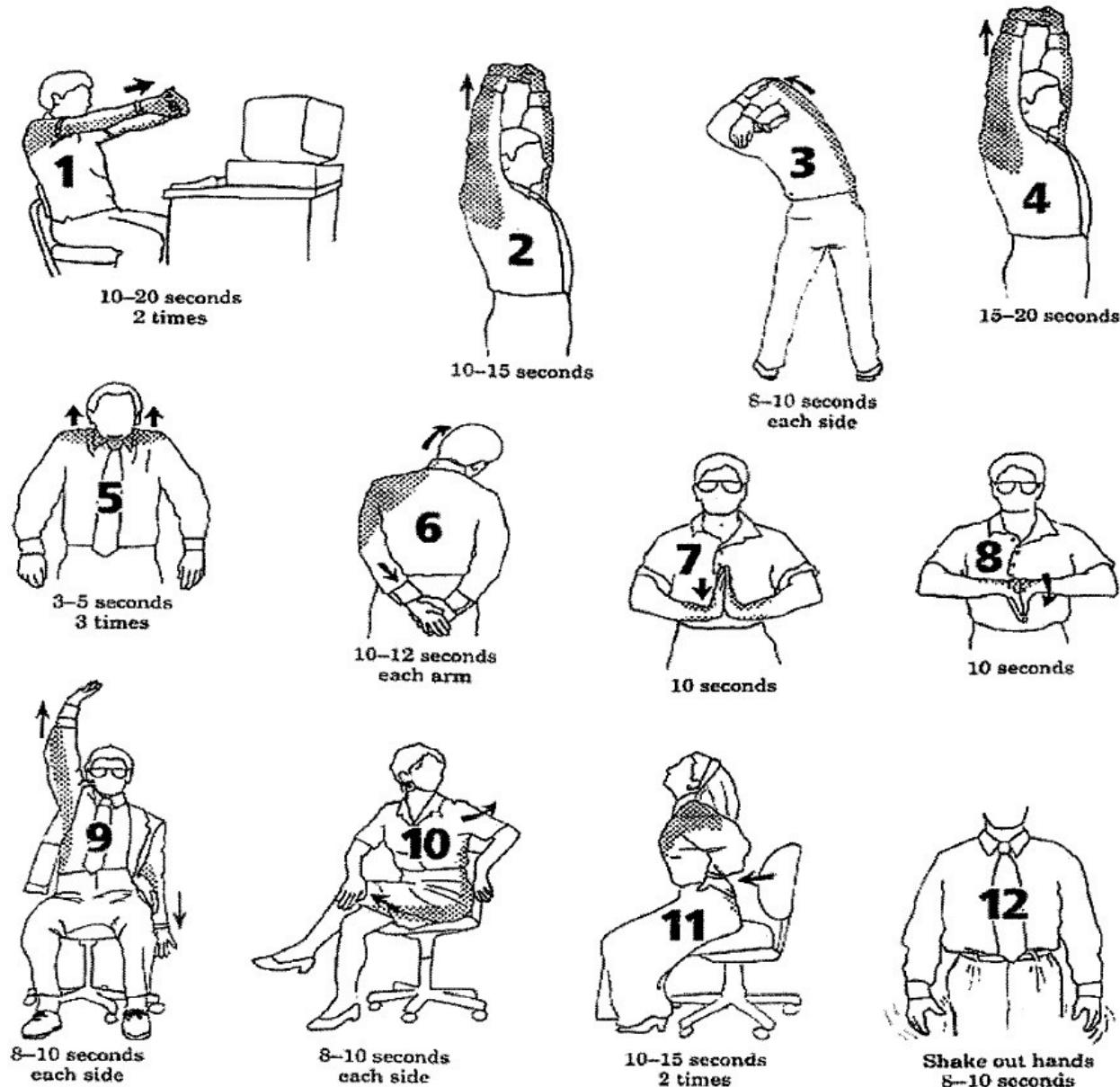
- Teaching yourself some simple keyboard shortcuts will cut down on mouse use and help to reduce the likelihood of pain in the hand and fingers of your 'mouse hand'.
- A quick way to learning shortcuts for Microsoft applications such as Word, Excel, PowerPoint, Publisher, or Outlook is to press and release the Alt key (to the left of the space bar).
A series of letter codes should pop up on the Ribbon, and by using the keyboard to select the relevant code, a second series will pop up to take you to the action you wish to perform. For example, to insert a row into an Excel spreadsheet, the sequence Alt H I R should be followed (try it!).
- There's a short [video](#) that demonstrates changing page layout using the Alt key sequence.
- Teach yourself one or two at a time and you will quickly build up a repertoire of the ones you most frequently need.
- Try the [Microsoft list of shortcuts](#) for Word, which allows you to choose which platform you are using
- Use the internet to search for shortcuts for the software you use. A good place to start is www.shortcutworld.com

Software and Training Needs

- Problems with software should be taken up with [IT Support](#).
- If you are using equipment that has not been provided by the University, ensure that it [meets the requirements](#) for security of data.
- For training needs, there is currently a limited [programme of courses](#)
- Both Microsoft and Apple offer a range of training materials:
 - [Microsoft training materials](#)
 - [Apple training materials](#)

Taking exercise

- When working from home you may find you spend even more time sitting, especially if you are unable to leave the house and have no garden to exercise in. It is vital that you periodically get up and walk around to increase the blood flow in your legs, plus take the opportunity to look out of the window at a distant view to rest your eyes.
- These stretches can also help to maintain blood and lymph flow throughout your body, especially if it's not practical to walk around as much as you would normally do. The guideline is, do it within your limits and listen to your body!



A final note

- Please do your best to improve your workstation at home with whatever resources you have to hand.
- When your workstation is as good as you can make it, complete the [WFH Computer Self-Assessment](#) and submit it.
- Your assessment will be received by SHEW for review. We will try to make suggestions where you have flagged up issues, and we may wish to arrange a video call over Teams to look at significant issues in more detail.
- Thank you.