

Examples of Ergonomic Hazards at Work

Items	Check for	Tips for improvement
Lighting	Is the lighting level in your office suitable for using your screen? Are the lights fitted with diffusers (shields to prevent glare)?	Check level of lighting. Consider additional lighting. Task lighting may be needed. Check if lights have diffusers. Diffusers are light covers such as that spread the light evenly.
	Is your line of vision free from bright lights, windows, reflections, or mirrors?	Consider repositioning computer if necessary. Check if windows have adjustable blinds to control the light. If possible, move the monitor so it is at right angles to the window. Use a flat screen monitor as they tend to have less glare or reflections.
Monitor	Can your monitor swivel and tilt?	Use these features to reduce glare and reflections.
	Is your screen's image clear and stable?	Check if vision test is needed. If screen flickers, adjust the screen frequency thorough the control panel on your computer.
	Is the screen brightness and contrast adjustable?	Check the monitor. Most monitors have controls to adjust brightness and contrast.
	Is the screen clean?	Use anti-static cleaning solution to clean the screen regularly. Liquid crystal display screens should only be dry wiped.

Items	Check for	Tips for improvement
Monitor <i>cont'd</i>	Is the screen directly in front of you?	If the screen is to one side the slight twisting can cause headaches and neck, back or upper limb pain.
Keyboard and Mouse	Does the keyboard work properly – without the keys sticking?	A keyboard with keys that are sticking can be a cause of upper limb pain.
	Are the keyboard symbols legible?	Check and replace keyboard if necessary.
	Does the mouse work properly?	If a mouse is difficult to move easily this can be a cause of upper limb pain.
	Where is the mouse positioned on the workstation?	Placement of the mouse can be varied and up to the individual – for example, placing the cordless mouse between the keyboard and user will reduce overstretching of the arm and shoulder.
Desk Area	Is your desk large enough to allow you to arrange your screen, keyboard and papers easily?	Most modern work surfaces are large enough but older desks may not be. The area may need to be tidied or re-organized to accommodate the most necessary equipment and place them in the ideal positions.
	Do you have space to vary your working posture and get into a comfortable position?	Ensure that the area under the work surface is clear. An old style desk with fixed drawers may not be suitable for computer use. Alternatively, using a dining or kitchen table is often too high for correct arm placement when keyboarding.

Items	Check for	Tips for improvement
Desk Area <i>cont'd</i>	Is there enough space in front of the keyboard to support your hands and arms?	Most modern work surfaces have enough space. The computer may need to be repositioned.
	Are all electrical and telephone cables tidy and secure?	Ensure all cables are secure to prevent accidents.
	Is your chair stable and on a 5-star castor base?	Check and replace chair if necessary. Chairs must be stable and allow freedom of movement.
Seating	Is the seat height adjustable?	Chairs must have height adjustment so the chair can be raised to a height that ensures the forearms are horizontal to the keyboard.
	Is the seat back adjustable?	Chairs must have a backrest that is adjustable independent of the seat so the back can be supported.
	Do you know how to adjust your chair?	There are usually 4 or 5 adjustments on a standard chair: <ol style="list-style-type: none">1. Chair height2. Backrest height3. Backrest tilt4. Seat tilt5. Lumbar support
	Are your forearms positioned horizontal to the keyboard (elbows near 90 degrees to the keyboard)?	Adjust the chair so that your forearms are horizontal to the keyboard. Use a footrest if necessary if you have to raise the chair and your feet are no longer comfortably on the floor.
		If forearms are not horizontal to the keyboard it can cause neck, back or upper limb pain.

Items	Check for	Tips for improvement
Seating <i>cont'd</i>	Do you use a document holder?	A document holder beside the monitor can prevent excessive neck and head movements.
	Are your feet supported once your chair has been adjusted to the correct height?	A footrest ensures support for the lower back.
Work Environment	Is the noise level such that you can easily carry out a conversation?	Recommended noise level in private office is 45 dB(A) [A weighted decibels] Source: Canadian Standard CSA Z412-00
	Generally, is the temperature in the office suitable for comfortable working?	Optimum temperature ranges for summertime are 23-26°C at 50% relative humidity. The wintertime range is 20-23.5°C at 50% relative humidity. Source: Canadian Standard CSA Z412-00
	Can you arrange to work away from the screen for at least 10 minutes in each hour?	Some work away from the screen is important – especially if health problems have been reported.
	Are you comfortable using all the required software packages?	Ensure training is provided for using all the required software packages.
	Do you experience headache after working at your computer for a reasonable period?	Ensure that: Lighting level is suitable. Use a desk lamp rather than overhead lights, if necessary. Eliminate reflections on the monitor screen.

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Work Environment <i>cont'd</i>		<p>Eliminate reflections on the monitor screen.</p> <p>Screen is directly in front of the user.</p> <p>Get an eye examination regularly.</p> <p>The screen is at eye level.</p> <p>Document holder is adequate to prevent excessive head movements when entering data from a document to the screen.</p> <p>Take regular rest breaks from the screen.</p>
Musculo-skeletal Concerns	<p>While at your computer, do you ever experience any tingling or numbness in your hands, wrists or arms?</p>	<p>Ensure that:</p> <ol style="list-style-type: none"> 1.Screen is directly in front 2.Keyboard works properly 3.The mouse works properly 4.The mouse is positioned as close to the keyboard as possible so the arm is in a natural line to avoid reaching or twisting 5.There is enough space in front of the keyboard 6.Forearms are horizontal to the keyboard 7.Use a wrist rest and padded mouse pad only when necessary

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Psychological Stress	Are you generally able to cope with your workload without experiencing undue stress or tension?	Discuss workload, duties and deadlines with your supervisor. Inform manager and health and safety committee, if available.
Health Concerns	While working, do you experience dry or sore eyes?	Ensure that you have an eye test at least every two years. Blink more often and look away from the screen every 10 minutes and focus on something at a different distance (wall, picture, window, etc) for a few seconds. Increase humidity in the room by introducing plants.
	Do you ever receive electrical/static shocks from your equipment?	Static shock can be reduced by avoiding nylon clothing. Rubber soled shoes may help - Obtain rubber mat if necessary. Ensure screen is cleaned with anti-static cleaning fluid.
	Do you have adequate emergency preparedness equipment?	First aid kit Fire extinguisher Smoke alarm Contact telephone numbers

Tips for Using a Laptop Computer

Occasional Users (not at a workstation)

FIND a chair that is comfortable and that you can sit back in.

POSITION your laptop in your lap for the most neutral wrist posture.

ANGLE the laptop so that you can see the screen without bending your neck.

Full-time Laptop Users (at a workstation)

POSITION the laptop on your desk in front of you so that you can see the screen without bending your neck.

USE a separate keyboard and mouse.

USE a tilting keyboard to ensure a wrist neutral posture, if necessary.

PLACE the mouse on an adjustable position mouse platform.

FOLLOW the posture guidelines for working on a computer workstation.

Working at Various Workstations/“Hotelling”

It is always best if you can have a workstation that is adjusted for yourself. However, if you have to use a shared workstation (for example, when reporting to the office), be sure you know how to:

- Adjust the chair
- When to use (or not use) a foot rest
- Adjust the height and angle of the monitor
- Adjust the keyboard and tray, if possible
- Use lighting options, where possible (individual light sources vs. overhead lights, pull blinds on windows, etc.)

You may not be able to make adjustments to every piece of equipment at the workstation, but some modifications are fairly easy to make and will help reduce your WMSD risk.

Be creative! You may be able to make some minor temporary modifications – a textbook or telephone book can raise the height of a computer monitor. A box (at the right height) or a phone book can be used as a footrest. When making modifications, always be careful that you are moving and lifting objects correctly. Do not create additional hazards by trying to make modifications.

