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1. Introduction

This document is intended for staff members who wish to set up their office workstation in accordance with sound ergonomic principles. These principles present an "ideal" recommended set up that may not suit every person. Some variations are acceptable based on individual limitations or preferences. Contact the Risk, Health and Safety Department at ohs@federation.edu.au if you require further advice.

Employees who are receiving treatment for a medical condition that may be related to, or aggravated by, their office set up should contact the RHS Department immediately.

2. Posture

Workplace furniture should be adjustable to accommodate a range of body sizes and shapes. Adjust office furniture to bring your posture as close as achievable to the ideal shown below (Figure 1):

- Your feet are resting flat on the floor, or a footrest
- Your thighs are supported by the chair seat with no pressure caused by the front edge of the seat under the thighs
- Your upper body is upright, with the chair backrest firmly supporting your lumbar curve
- Your shoulders are relaxed, down and back
- Your elbows are close to your sides and upper arms are vertical
- Your forearms are approximately horizontal and your wrists are aligned with your forearms when your fingers are on the keyboard
- Your head is upright or inclined slightly forward with no neck strain.

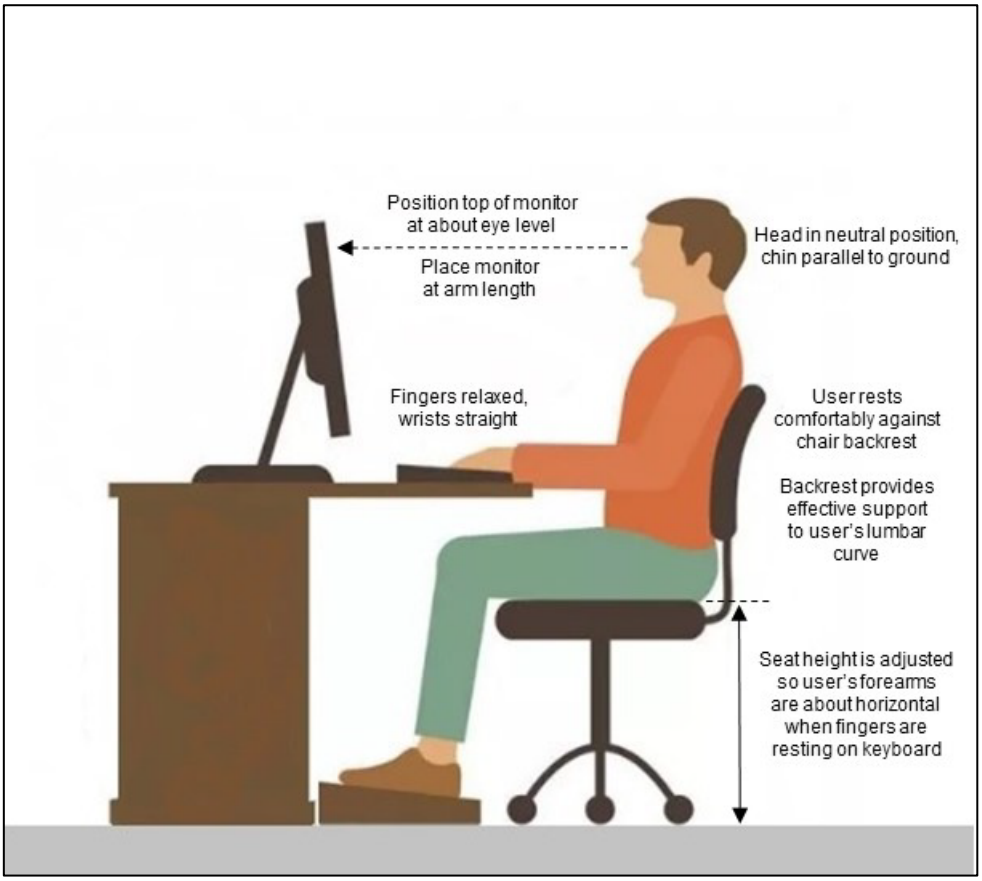

Figure 1

Recommended workstation measurements:

- Work surface should be between 680mm and 720mm from the floor
- Work surface should have minimum dimensions of 1500mm x 900mm
- Thickness of the work surface should be between 25mm and 33mm
- Adequate leg space - minimum depth of 550mm and width of 800mm
- A foot rest may be necessary for fixed-height workstations
- Sharp edges, corners, protrusions or rough surfaces are avoided.

3. Work Surface Layout

Place items used frequently within easy reach from your normal seated working position. Items used less frequently may be placed at full arm extension, or even require a slight stretch. Refer to figure 2.

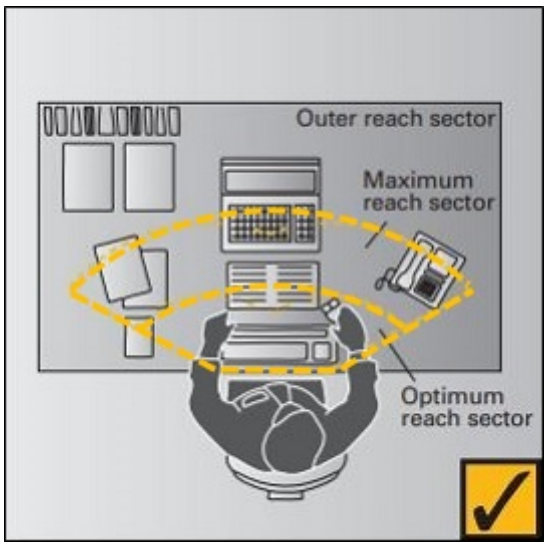

Figure 2

It is desirable to place heavy items (e.g. large textbooks, thick binders, heavy instruments) away from your desk. Attempting to handle heavy items whilst seated is hazardous. Stand up and use correct manual handling technique instead.

4. Workstation Equipment

4.1. Chairs

Important aspects of chair design include:

- Stability (5 star base, and freely moving castors on carpet, or glides on a hard floor surface)
- Adjustability: it should be easy to adjust the chair from a seated position for height of seat base and back rest, and tilt of seat base and back rest
- Grip: woven fabric upholstery is preferred, except where vinyl is necessary (e.g. laboratories, kitchens, etc.).

Figure 3

You can check your chair is correctly adjusted by ensuring:

- Your posture is upright or slightly leaned back
- The lumbar region of your back is firmly supported by the back rest
- A minimum 2-finger gap is present between back of knee and chair
- Feet are flat on the ground or footrest.

4.2. Monitor Placement

- The distance between you and the monitor should generally be 600mm or more (arm's length away). However, this is dependent on individual characteristics such as sight impairments.
- The top edge of the monitor should be at about eye height
- The centre of the computer monitor should be no higher than 400mm above the work surface
- Glare and reflections on the monitor should be eliminated
- Monitor contrast and brightness should be adjusted to avoid eyestrain.

4.3. Printers

Printers should generally not occupy valuable workspace on desktops. Consider the following:

- The routing of cabling between the printer and the computer
- Space occupied by the printer
- Unobstructed access to the printer
- Noise from some types of printers
- Storage space for printer paper.

4.4. Mouse

Place your mouse directly beside the end of the keyboard on your preferred side. Place the mouse pad as close as possible to the keyboard to avoid over-reaching.

To minimise fatigue when using the mouse:

- Learn to use it with either hand so that you can swap between right and left. The buttons can be reversed in "Settings > Devices > Mouse"
- Avoid holding onto the mouse when not in use.

4.5. Document Holders

Document holders promote good posture because they prevent repeated twisting and turning. Three types of document holders are commonly available. Refer to figure 4.

Position your document holder to minimise head and eye movement. For example, if you spend the majority of your time typing looking at a document as you type (touch-typing), you can place the document holder directly in front of you (behind the keyboard) and the computer monitor slightly to one side.

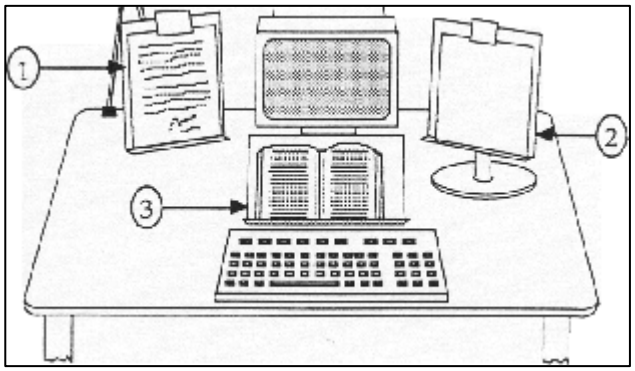

Figure 4

4.6. Footrests

Footrests are sometimes necessary for fixed-height seated workstations where operators' feet cannot comfortably reach the floor. It should be non-slip and large enough (350-400mm wide) with a slight angle (approximately 10 degrees).

4.7. Cables

Neatly tie cable leads from computers, telephones and other work equipment to avoid creating a tripping hazard. ITS can assist with this.

4.8. Reading and Writing Tasks

For reading or writing tasks, desk height should be just above elbow height to provide appropriate support of the upper body, arms and elbows.

5. Sit-stand Workstations

5.1. Background

Sit-stand workstations come in two main forms:

- A height-adjustable desktop workstation placed onto a standard desk and allows the user to swap easily between the sitting and standing positions.
- A full desk with an entire top surface that is adjustable in height (see Figure 5).

Figure 5

Staff members may be interested in using a sit-stand workstation for two main reasons:

- Specific concerns related to a pre-existing medical condition; or
- A general interest in the health benefits claimed to be associated with sit-stand workstations for office workers.

5.2. Pre-existing Medical Conditions

In such cases, the process to obtain a sit-stand workstation is generally straightforward and revolves around:

- the duty of the university to make reasonable adjustments for staff's temporary or permanent disability, and
- specific medical advice* relating to the staff member concerned.

**Note: for written advice from your treating medical practitioner to be useful, it should:*

- *Specify what diagnosed medical condition you are being treated for*
- *Confirm that the provision of a sit-stand desk would benefit you from a medical viewpoint in relation to the diagnosed condition*
- *Specify as many details as possible regarding the recommended type of desk, how long it is expected you will require the device (e.g. temporary or permanent), the recommended duration of standing and sitting postures during the course of a workday, etc.*

The employee is required to approach their supervisor or manager, who is in turn required to contact the Risk, Health and Safety department. The Risk, Health and Safety department will co-ordinate further action in consultation with the employee and the supervisor/manager.

The cost of obtaining, installing and maintaining sit-stand workstations must be borne by the local School or Directorate. Any purchase of a full height-adjustable desk must be organised through Facilities Services.

A sit-stand workstation made available for medical reasons is specifically assigned to that employee. If the employee transfers to a different location or different work unit within the university, the sit-stand desk needs to be relocated with them.

5.3. General Health Concerns without Pre-existing Medical Condition

Where staff members believe that a sit-stand office workstation would be beneficial to their health, they should discuss it with their supervisor or manager. The manager/supervisor is advised to contact promptly the Risk, Health and Safety department.

The Risk, Health and Safety department will conduct an ergonomic assessment and send the written report to the staff member and their supervisor/manager. The emphasis is usually on adjusting work practices to ensure that tasks are varied, breaks from sitting are regular, and staff have the opportunity to take short walks during work breaks. However, in some cases, the report may include a recommendation for a sit-stand workstation either as a permanent measure or as a trial.

The cost of obtaining, installing and maintaining sit-stand workstations must be borne by the local School or Directorate. Recommendations to obtain a sit-stand workstation do not override normal purchasing approval processes, and requests to purchase such items for staff members without relevant pre-existing medical conditions may be refused.

Any purchase of a full height-adjustable desk must be organised through Facilities Services.

If the supervisor/manager has approved the purchase of a sit-stand workstation, the employee may need to organise assistance from:

- (for full height-adjustable desks) Facilities Services to install the new desk and to have the original desk placed in storage;
- (for height-adjustable desktop workstations) co-workers to install the platform, as some models are quite heavy and unwieldy; and

- Information Technology Services to manage the cables and computer move.

The employee is also required to contact Risk, Health and Safety for adjustments to the new sit-stand workstation. The Risk, Health and Safety department will provide additional follow-up assistance if necessary.

5.4. Factors to be taken into Consideration for Sit-stand Workstations

Is the current desk in good repair and is there suitable space to add a height-adjustable desktop workstation?

On which angle could the retrofitted workstation be added? E.g. one side of a desk or in the middle of a corner workstation.

What tasks are performed at the desk? E.g. reading, writing, computer use, phone use, interviewing, meetings, handling heavy books.

What equipment will the user be using? E.g. laptop, single, dual or triple monitors.

If a full height-adjustable desk is to be purchased, it must have an electric lift rather than a manual lift to reduce the risk of injury.

If using a desktop workstation, it needs an assisted height adjustment mechanism to reduce the effort required.

There needs to be a fail-safe mechanism to prevent inadvertent movement and a control locking mechanism to prevent inadvertent operation of the desk/workstation.

User/s need to be trained on how to safely operate their height-adjustable desk/workstation.

A suitable office chair still needs to be provided to allow the user to sit for some tasks and when tired.

There needs to be space to store the chair out of the way when not in use.

Good supportive footwear (and an anti-fatigue floor mat if standing on a hard surface) will reduce fatigue during standing.

A shorter, compact keyboard (without the numeric pad) may be more suitable for a desktop workstation to maximize the workable area. It will also reduce the reach required when using the mouse.

Desk and monitor height as well as correct arm posture for each user are important when using either options.

The site of the hard drive needs to be easily accessible for turning the computer off/on and for utilising computer discs. Cabling needs to be the correct length and tied back to protect it from damage.

Ensure adequate lighting sources to the desk and monitor in both seated and standing positions.

6. Other Aspects of Workstation/Office Set-up

6.1. Lighting

Good lighting helps prevent eye strain. You can minimise glare or reflection present on your computer monitor by:

- Adjusting the artificial lighting
- Controlling the natural lighting

- Repositioning the monitor in relation to light sources, e.g. the monitor could be re-set at right angle to incoming natural light.

You can find detailed information on many aspects of lighting, including recommended illuminance levels for various types of office tasks and environments in Australian Standard AS1680.2.2 *Interior lighting – Office and monitor-based tasks*.

6.2. Control of Noise

Generally, noise levels in office areas are well below those known to pose a risk to hearing. However, noise can become an issue if it interferes with communication, annoys or distracts people and affects work tasks. Solutions to controlling noise include:

- Eliminating the source
- Sound proofing
- Repositioning

6.3. Work Temperatures

A comfortable temperature range for sedentary work is between 18-25°C. General suggestions for improving thermal comfort include:

- Regulate air conditioning for temperature and humidity
- Avoid locating workstations directly in front of, or below, air conditioning outlets
- Control direct sunlight
- Minimise draughts and thermal differences

7. Work/Job Design

Whilst the correct workstation design and set-up plays an important role in how comfortable you are at work, so does Work/Job Design.

Job Design is the process of deciding on the tasks and responsibilities to be included in a particular job. Good job design aims to balance the technical and organisational requirements of the job as well as the social, personal and physical needs of the employee.

From a health and safety viewpoint, the three most important aspects of good job design for office-based work are (1) variety, (2) autonomy and (3) feedback on work performance. Having a variety of tasks to perform adds to feelings of achievement and self-worth. In jobs where computers are used intensively, additional tasks unrelated to the type of work should be added wherever possible to increase variety and allow time for muscles to recover.

Tips

- Organise your workday to include a variety of sedentary and more active work
- Reduce stress by planning ahead and setting realistic expectations for what you can accomplish during the workday
- Organise your workload to help even out busy and slow periods of time
- Organise equipment, supplies and furniture in the most efficient arrangement for daily tasks
- Acknowledge ideas and accomplishments of co-workers on a regular basis
- Develop stress reduction and relaxation techniques that work for you at the office and at home.

8. Exercises

Your body must stay active to stay healthy and to maintain full function. There are many health benefits to taking part in regular exercise. Obtain specialist advice before starting on an exercise program.

Suggested examples of exercises include:

Eye Exercises

- Blinking
- Looking at distant objects.

Back Exercises

- Walking
- Swimming.

Neck Stretches

Gently lower ear toward shoulder and hold for 10 seconds. Slowly roll chin to chest and up toward other shoulder. Hold for 10 seconds. Repeat several times. Do not extend your neck backward.

Shoulder Rolls

Circle both shoulders forward several times, then backward. Repeat three to five times.

9. Further Information

WorkSafe Victoria, Officewise – A Guide to health and safety in the office