Occupational Health Clinics for Ontario Workers Inc.

Centres de santé des travailleurs (ses) de l'Ontario Inc.

OFFICE ERGONOMIC REFERENCE GUIDE

Presented by:
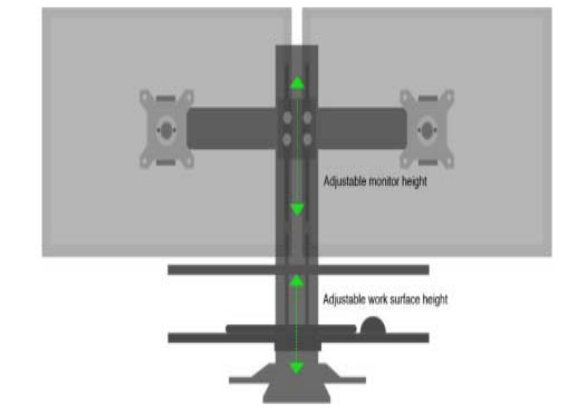
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OHCOW Ergonomists

Office Ergonomic Reference Guide Begins…

WHAT YOU MIGHT FIND IN THE FIRST 4 MODULES

1) Introduction to Ergonomics
2) Work Surfaces
3) Chair
4) Monitors

Introduction to Ergonomics

- Main Ergonomic Risk Factors in the Office: Repetition, Awkward Postures, Static Forces

- OHSA:Employers have a legal responsibility to provide a safe workplace. This includes improving the workplace and implementing measures to protect workers from all hazards, including MSD.

- CSA Office Ergonomic Standard Z412-17

Ontario

"An employer shall take every precaution reasonable in the circumstances for the protection of a worker."

www.ontario.ca/laws/statute/90o01

CSA Group

Z412-17

Office ergonomics — An application standard for workplace ergonomics

Introduction to Ergonomics

Before You Buy Office Equipment

Find out what you need:

- Ensure the equipment provided fits the user (i.e. one chair may be too large for one user yet too small for another user).
- Try Before You Buy. Arrange to get samples of equipment from your supplier for users to trial if possible.

- Develop a *standard* for purchasing based on the **CSA Z412 Office Ergonomic Standard** to ensure that equipment will 'fit' the workers and be suitable to the tasks they perform.
- If the workstation is being shared, you may want to consider more adjustability (i.e. height adjustable workstation).

Purchasing Considerations

PROCEED WITH CAUTION

Due to the fact there is no legislation on labelling products as ergonomic one must proceed with caution when purchasing equipment labelled as "ergonomic".

Work Surfaces

- A workstation should:
  - Be solid
  - Provide adequate space
  - Provide sufficient clearance
  - Allow for neutral sitting and standing postures

- Workstation configurations:
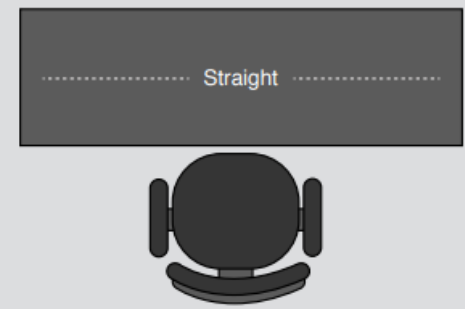 - Straight
  - Corner
  - L-shaped
  - U-shaped

Straight

Merits:
- Good when the user performs only one task (computer or paperwork).

Limitations:
- Often there is insufficient space to house all the required computer components.
- When an individual performs multiple tasks.

Straight

Corner

Merits:
- May allow workspace on either side of the computer.

Limitations:
- Paperwork area potentially limited by length of straight sides.
- Often curve is too small to position keyboard and mouse correctly to maintain neutral postures.
- Leg clearance is often limited by desk supports under the workstation.
- Limited by available workspace.

Corner
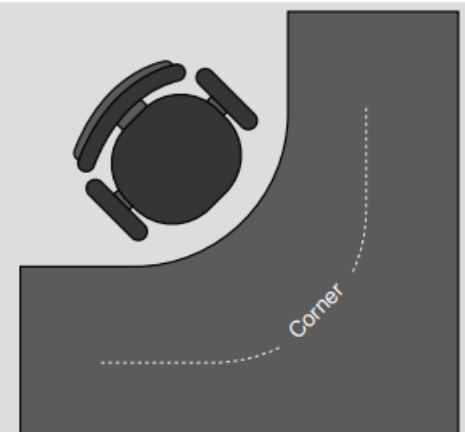
Chair

What Makes a Chair Ergonomic?

A chair is only "ergonomic" if the user can adjust it to fit their own personal dimensions.

In order to do this the following parts of a chair need to be adjustable:

- **Seat pan** – height and depth
- **Backrest** – height and angle
- **Lumbar Support** – height and depth
- **Armrests** – height, width and ability to rotate

Back Rest
Lumbar Support
Arm Rest
Seat Pan
Casters
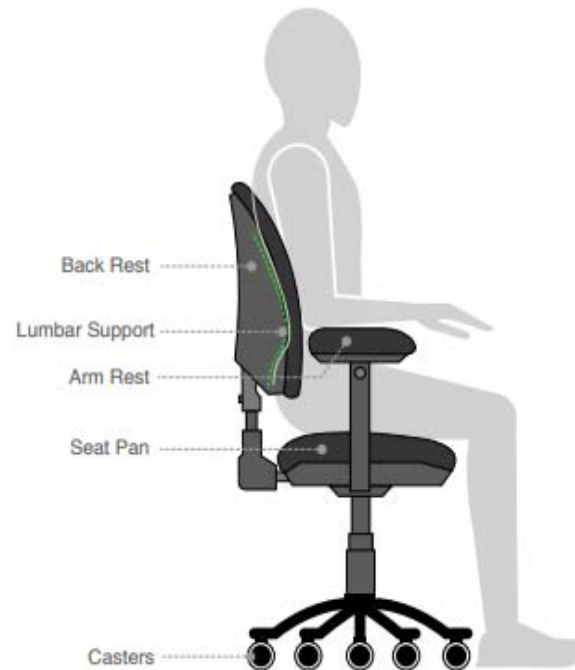
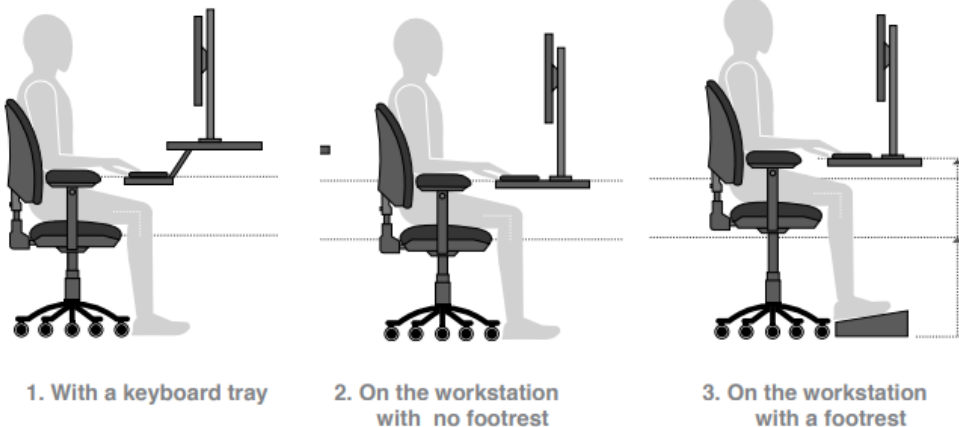Seated Neutral Posture in an Adjustable Chair

The chair must fit the user as well as suit the tasks that they perform.

One style of chair may not suit every user. The chair should provide support and stability to the user and allow movement through multiple positions.

Chair

Seat Height
- Depends on the size of the user
- The working height dictates the height at which the seat is positioned

1. With a keyboard tray
2. On the workstation with no footrest
3. On the workstation with a footrest

Armrests

The armrests on a chair should:

- Support the arms.
- Allow access to the workstation.
- Distribute forces evenly.
- Allow the user to sit in a variety of postures.

Just Right

Armrest Height

The armrest height should:

- Be adjustable in height and support the users' forearms and/or elbows.
- Allow users to maintain neutral postures; should not cause the user to elevate or drop their shoulders in order to rest their arms.
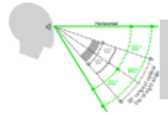
Too Low

Too High
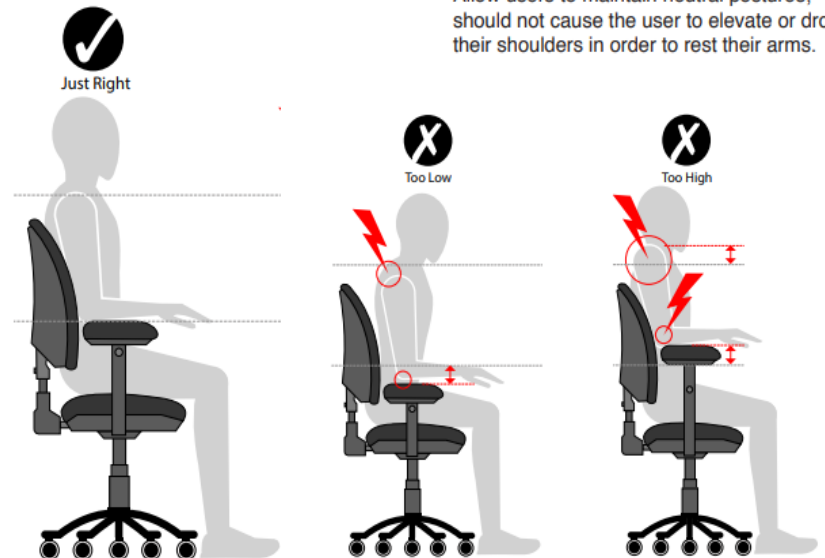
Computer Screens/Monitors

Positioning and Adjusting Monitor(s)

When positioning and adjusting a monitor(s), you need to consider:

- Height
- Horizontal placement
- Monitor viewing angle
- Viewing distance
- Number of monitors

Screen Height Adjustment Devices:

- Height Adjustable Monitors
- Monitor Risers
- Stationary Monitor Arms
- Articulating Monitor Arms

- **Articulating Monitor Arms**

  Merits
  - Can adjust monitor(s) in a wide range of heights, angles, and configuration.
  - Can be easily manipulated.
  - Can relocate the monitor when not in use.
  - Ideal for single monitor use.

  Limitations:
  - Can take up a large portion of the workstation.
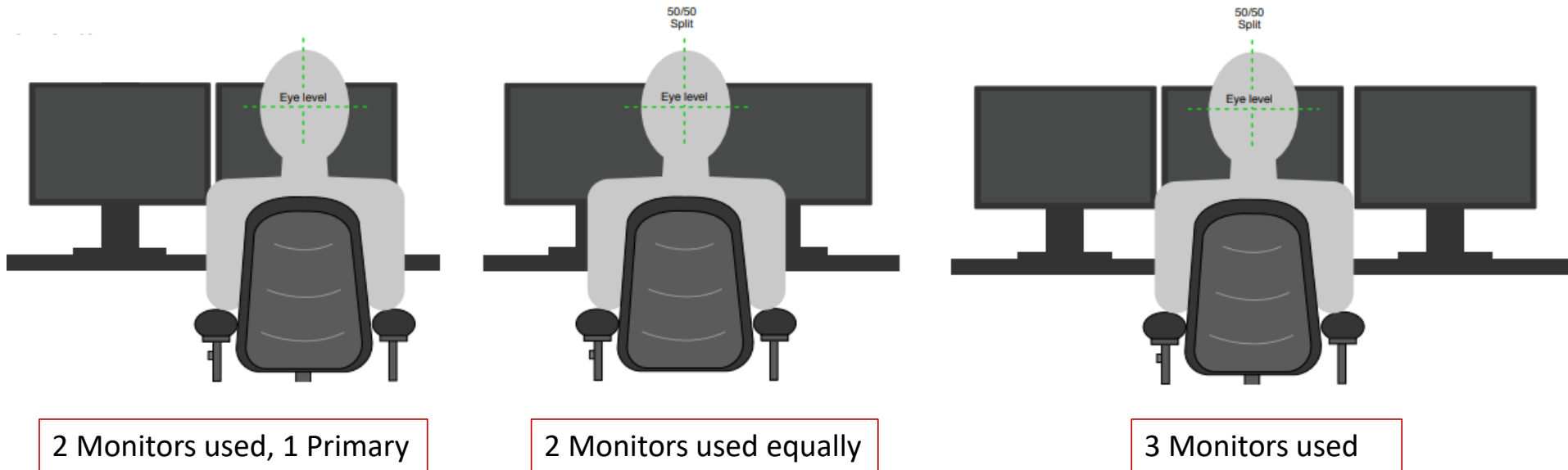 - Difficult to configure if used for multiple monitors.
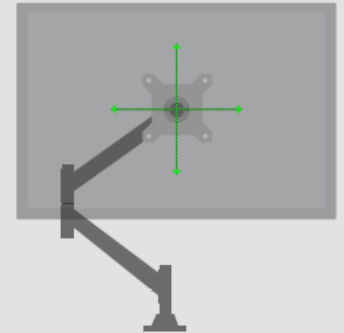
Computer Screens/Monitors

Multiple Monitor Placement

2 Monitors used, 1 Primary

2 Monitors used equally

3 Monitors used

WHATS TO COME?

NEXT WEEK WE WILL BRIEFLY DISCUSS THE NEXT 4 MODULES.

5) External Equipment & Accessories

6) Technology: Laptops, Mobile Telephones & Tablets

7) Sit/Stand Workstations

8) Remote (Mobile) Workstation Setup