# WORKSTATION ERGONOMICS ASSESSMENT TOOL





**Environmental Health & Safety Office** 

# **Workplace Ergonomics**



"An applied science concerned with designing and arranging things people use, so that the people and things interact most efficiently and safely."

The following presentation has been designed to guide you in setting up a proper, ergonomic workstation to prevent long term injury to your joints and muscles caused by repetitive muscle strain.

#### Let's start with the chair...



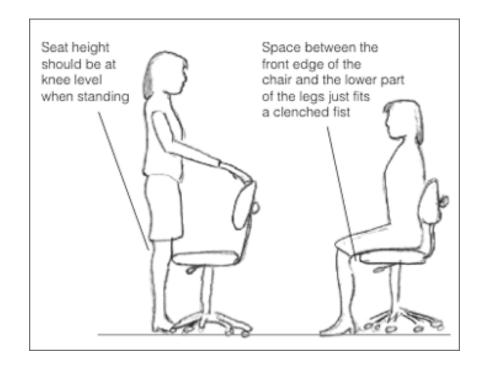


- A proper chair is essential to obtaining good posture and position while working at your station.
- It is important that your office chair has the following capabilities:
  - Adjustable armrests
  - Rounded front seatpan
  - Adjustable backrest with lumbar support
  - Height adjustments



# Chair Adjustment – Step 1

- Your thighs should be parallel to the floor and knees should be at a 90 degree angle.
- Allow 1-3 inches (size of your fist) between the edge of the seat and the back of your knees to allow adequate circulation.



## Chair Adjustment – Step 2





- Adjust the height of your chair so that your feet rest flat on the floor. If necessary, use a foot rest.
- Adjust backrest so that the curve of your chair supports your lower back (lumbar support).

# Chair Adjustment – Step 3

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- Adjust armrests so that your arms can rest freely when not typing. Arms should never be resting on armrests while typing.
- When at rest, arms should be relaxed and elbows at a 90 degree angle.

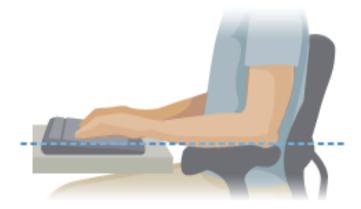


# Let's talk keyboards...



- A keyboard tray is usually necessary to obtain proper posture while typing.
- You should adjust your tray so that your upper arms rest by your side and your forearms are parallel with the floor.

Your elbows should remain at a 90 degree angle while typing.



# Let's talk keyboards...



 Your keyboard tray should be large enough to accommodate both the mouse and the keyboard.





#### **Monitors**

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- Your computer monitor should always be centered in front of you while sitting at your workspace.
- It should be positioned approximately one arm's length away from your eyes.
- The top of the screen should be at eye level when sitting up straight.



#### **Monitors**



- A monitor riser, like the one pictured below, can be used to make the proper height adjustments.
- If you wear bifocals contact EHS at (703) 993-8448 or email <u>safety@gmu.edu</u> for a full assessment.



#### Need a document holder?



- Document holders support printed materials needed during computer tasks close to the user and the monitor.
- Document holders should:
  - Allow documents to be placed directly in front of the monitor, between the keyboard and the monitor.
  - Be stable when loaded with heavier documents, such as, a textbook.



#### Need a document holder?

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A document holder can also be positioned to the side of the monitor, as pictured to the right. Make sure the document holder is at the same eye level as the monitor. This reduces frequent movement of the head, neck, and back.



# Additional Helpful Points

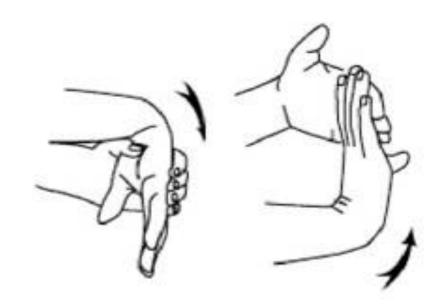


- Use a headset for frequent phone use to prevent cradling the phone between your head and shoulder.
- Position all commonly used items within close reach to avoid shoulder strain.
- Always avoid resting wrists and elbows on sharp objects or edges.

# Additional Helpful Points



Take frequent breaks! Stretch and look away from your monitor at least every 30 minutes for at least 30 seconds.



## **Ergonomic Evaluations**



#### Still unsure if your workstation is setup properly?

Contact EHS at (703) 993-8448 or via email at <a href="mailto:safety@gmu.edu">safety@gmu.edu</a> to schedule a full ergonomic evaluation.

#### References



- Computer Work Stations. US Department of Labor- Occupational Health and Safety Administration.
   <<a href="http://www.osha.gov/SLTC/etools/computerworkstations/">http://www.osha.gov/SLTC/etools/computerworkstations/</a>
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    wkstation\_enviro.html>>
- Adams, Chris. <u>Guide to Setting Up an Ergonomic Work Station</u>. About.com. Ergonomics.
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