

Roger Williams University Ergonomics Program

The purpose of the Roger Williams University Ergonomics program is to promote employee health by decreasing workplace exposure to ergonomic risk factors. RWU Environmental Health and Safety recommends reviewing the 12 items listed here to evaluate your workstation.

If, after adjusting your workstation and reviewing the adjustments with your manager, you feel that your workstation is not ergonomically suited for you, please contact Environmental Health and Safety at 401-254-3494 for a workstation assessment.

Any further recommendations for office equipment after the assessment is complete would be ordered through the requestor's Department using the Department's budget line.

12 Tips for an Ergonomic Work Station

1. Top of monitor at or below eye level

- The computer monitor should be properly aligned. Any portion of the monitor above eye level contributes to neck and shoulder strain.
 - If your monitor is too high because it rests on top of the tower, place the tower under the desk, preferably on a tower holder.
 - If the monitor is too low, consider spacers or adjustable arms to lift it off the desk.
- Make sure to keep the tower away from the leg area under the desk to maintain proper body symmetry.

2. Monitor and keyboard centered in front of you

- The top inch of visible monitor screen should be level with your eyes.
 - If you lean back while working, adjust the monitor lower to accommodate your more typical seated position.
- The monitor and keyboard should be centered in front of you, not off to an angle.
- There should be a straight line from your nose to your belly button to the center of the space bar to the center of your screen.
- There should be no twisting in your shoulders or neck.
 - Centering the keyboard properly often pushes the mouse too far away to the right. This means you need to reposition the mouse, not use the keyboard in an incorrect posture.

3. No glare on screen

- Task lights can be used as a considerably more effective means of lighting a desktop than overhead fixtures, which are costly and inefficient.
 - Screen Glare can cause headaches and eyestrain is listed as a top health hazard in the workplace.

- Combined ambient-task lighting is likely to be the most effective solution in any environment in which workers is doing both paperwork and computer work.
- Move light sources or cover windows to remove glare or reflections from the screen.
- Ensure default color choices for applications maximize contrast and ease of use.
- The monitor screen should be at 90 degrees to your line of vision, and not tipped too far upward.
- Proper monitor positioning is essential to avoid eye strain.

4. Documents in with keyboard and monitor

- If you spend significant time working from documents to the screen, you should have a document holder instead of placing papers flat on the desk and leaning or twisting your neck to see them.
 - For lightweight items, a monitor-mounted holder works well.
 - For frequent, intensive use, an inline holder is best.
 - For intermediate and occasional use, a freestanding holder next to the monitor usually is satisfactory.

5. Negative tilt keyboard and monitor

- Adjust the keyboard tray to a negative tilt, which means tilting down as it goes away from you.
- At no time should the keyboard be tilted upward toward the back; this increases wrist angles and stresses.
- If your keyboard has little feet in the back, lower them to remove tilting.

6. Wrists flat and straight

- Your wrists should be flat and straight in relation to your forearms when using the keyboard or mouse.
 - Look at your hands as you type - is your middle finger in a straight line following the bones of your forearm? If not, you may need a different keyboard.
- This is common if you have broad shoulders, long arms, and large hands, any of which can make a standard straight keyboard uncomfortably small.
- There are a number of alternative keyboards to solve this problem.
- People with narrower shoulders and a small build should not use a keyboard that is too large for them; this may cause elbow problems.
- If you rest your palms on the desk while typing, your wrist is bent back to reach the keyboard and you should have a soft palm-rest to level out that angle.

7. Arms and Elbows Close to the Body

- Your arms should hang relaxed and close to your body with no effort put into keeping your shoulders in position or your elbows out.

- Your elbows should be bent at about a 90-degree angle - perhaps a little more open, but no less.
- If the angle is too large, your wrists will need to bend back to reach the keyboard and you need your forearms to be level.
- Look at the reach to your mouse.
 - If it is on the right side, you may have significant external rotation at the elbow and/or stress in the shoulder.
 - To alleviate these problems, you need to either move the mouse to the left side of the keyboard and use your left hand (it takes about two weeks to make the transition completely) or find a way to move the mouse closer to the space bar on the right.

8. Change posture often

- Your choice of posture within your comfort zone may vary with your task. For example, you may find a slightly reclined posture more comfortable computer tasks and a more upright posture comfortable for tasks requiring frequent references to papers or books.

9. Work in a Reclined Position

- Adjust the back support of your chair so that it supports your lumbar spine.
 - It is acceptable to sit upright or slightly reclined, as long as your back is supported and your spine retains its proper shape.
 - If your lumbar support is not adjustable, adding a rolled-up towel or small cushion may help.
 - Most chairs are able to either recline or be locked upright, so experiment to find the proper type of support for your back.

10. Take Frequent Short Breaks

- Sitting at a computer for long periods often causes neck and shoulder stiffness and occasionally lower back pain.
 - Do these stretches every couple of hour or so throughout the day, or whenever you feel stiff. Photocopy this and keep it in your drawer.
 - Also be sure to get up and walk around the office whenever you think of it. You'll feel better!

11. Feet Flat on the Floor or Footrest

- Your feet should rest flat on the floor.
 - Lower your seat until this happens and you feel the pressure ease off from the underside of your thighs.
 - Your monitor and keyboard should be adjusted so you can sit down at this level.
 - If they do not move low enough, raise the seat pan and procure a footrest so that when you are seated higher, you are still supported correctly, with your hips and knees at the same level.

12. Keep Your Computer Tower off the Desk

- Aside from giving you more space to work on your desk keeping your tower off the desk provides many more benefits.
 - Your computer will be protected from dirt, dust, bumps, accidental spills, and even flooding from broken pipes or overhead sprinklers – all of which are real dangers for towers that sit on a floor or desk.
 - Whether on wheels or sliding tracks, tower holders facilitate access to your tower's cables, ports and drives, yet allow the tower to be stored out of sight when not in use.