

Computer Comfort & Safety in the Workplace

Sitting at your computer could seriously damage your health! With many workers now using computers on a daily basis, computer-related illnesses and diseases have increasingly become an issue in recent years.

Eye disorders are the commonest problem to affect the regular computer user, and employers now have a legal obligation to arrange sight tests for operators. Headaches, often the result of muscle tension, are also common, as are tinnitus and neck and back problems.

The most widely publicised effect, however, is repetitive strain injury (RSI), also known as ‘upper limb disorders.’ Caused by the stress of frequently repeated hand and wrist movement, the first symptoms of RSI are usually tingling and burning sensations in the hands. Eventually there may be pain in the hands, wrists, and forearms. In severe cases, the sufferer might have to give up work altogether.

Well, that’s the bad news. The good news is that many of the health threats posed by computer use can be eliminated by simple procedures.

Reducing the risk of developing RSI

You can reduce your risks of getting RSI by changing your work habits:

Posture

The way you sit at your computer affects your chances of developing not only RSI but also backaches, headaches, and many other associated problems. If you lean forward with your neck extended, your shoulders rolled in, and your eyes sharply focused on the screen, you are risking your health. Instead:

- Make sure you hold your head correctly, with your head up and chin tucked in. (The Alexander Technique is excellent for learning good neck and head positions. You will find local practitioners listed in the *Yellow Pages*.) Your back should be gently arched; a small cushion in the small of your back will help maintain this posture
- Place your feet flat on the floor, knees lower than buttocks
- If the edge of your chair presses behind your knees, you are restricting blood flow to your lower legs and feet. Use a footrest, or even a phone book, to support your feet
- Keep your elbows almost at right angles with a gentle, downward slope from elbows to fingers on the keyboard
- Don’t angle your wrists upwards or rest your wrists or forearms on the desk or the arms of your chair
- Keep a regular check on your body position. Move equipment or furniture if necessary. Never slouch.
- Get up and walk about regularly

Repetition

The more repetitive your work, the greater your chance of developing RSI. Take the following action:

- Create macros to reduce keystrokes
- Make maximum use of a mouse where appropriate
- Relax comfortably when doing non-keyboard activities

Fatigue

A tired body is more prone to injury:

- Massage the small muscles of your hands and fingers at least twice a day
- Drop your hands down to your sides occasionally and gently shake your hands and fingers
- Every half-hour, stop and take some deep breaths
- Take frequent short breaks to relax the body

Stress

This is a major problem in today's workplace, and computer users are particularly vulnerable. Get help if you are finding your system too complicated. There are excellent self-help manuals available, and open learning centres or evening classes can give you a better knowledge of your system. There might even be an expert in your office who can help you. If you recognise you are easily stressed, try to avoid stressful situations such as setting yourself unrealistic deadlines or being unwilling to delegate.

Eyestrain

Dust on the screen, poor light, over bright light, glare, and flickering monitors can all cause eyestrain, headaches, nausea, and fatigue. To reduce these risks:

- Blink regularly to lubricate your eyes
- Avoid eye makeup that could flake into the eye
- If your office is being redecorated, opt for soft light colours such as cream or beige
- Reduce overhead lighting and use controllable local light
- Keep screens dust free using special solutions
- Double space work for easy reading

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- Find your computer's best colour combinations to suit your eyes - yellow on blue is restful for many people
- Upgrade old equipment
- Stop work frequently and look at something easy on the eye, such as flowers or a picture
- Revive tired eyes with simple eye exercises: alternate quickly between looking at a distant object and a close one; visually trace a horizontal '8', first in one direction and then the other; using your fingertips, massage the muscles above and below the eyes

Headaches

Nearly all headaches associated with computer use are tension headaches caused by muscle contraction. Check yourself for unconscious triggers such as jaw clenching or adopting a fixed staring position for long periods. Try to:

- Take a break and stretch your head and neck upwards
- Massage the small muscles in the bottom inch of the back of the skull at least twice a day
- Slowly rotate both shoulders forward and back in a full circle four times. Rotate each shoulder separately four times too. Do this at least twice a day

Make the changes permanent

Don't slip back into the bad habits that could cause you discomfort, or even pain. Here's a checklist:

- Check your posture, or ask a co-worker to check it for you
- Check your fingers are never higher than your wrists
- Don't rest wrists or forearms on the desk or on the arms of your chair
- Keep your workplace uncluttered for optimum use of keyboard and mouse
- Position the monitor at least two feet from the front of your desk at, or slightly below, eye level
- Stand up occasionally. You could even try some typing standing up - some people find it restful
- Take regular short breaks
- Eliminate as much background noise as possible. Pads under equipment will help to reduce noise from printers and cooling fans
- Clean the screen whenever it is dusty

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- Try not to rely on painkillers - they only mask the problem
- Blink regularly to keep your eyes lubricated
- Drop your hands down to your sides regularly and shake your hands and fingers
- Do gentle exercises to relieve muscle tension

Ergonomics - The science of human engineering

Ergonomics is concerned with how you feel and perform relative to your job, equipment, and work environment. The number of computer users who do prolonged, repetitive tasks has increased dramatically. Computer related discomfort - stress, fatigue, and even repetitive strain injuries - have become the subject of extensive ergonomic research.

A workstation tailored to individual needs can make a tremendous difference. For example, an inexpensive copy holder will lift and tilt the copy to the most comfortable position, eliminating the need to bow your head as you refer to text, thereby reducing neck and shoulder strain. As you switch from the copy to the screen and back again, the copyholder lessens the degree of tiring head movements and visual refocusing. It also helps to moderate the glare from overhead lights reflecting off your paper.

Choose the right chair

Inferior chairs, combined with the poor posture so many of us suffer from, cause many office injuries each year. The very latest technology won't help reduce risk if the users are unable to adjust their chairs.

- Choose a chair that spreads the load at your back and has an angled seat that maintains acceptable loads on the buttocks and thighs. A swivelling seat pad is beneficial
- When you are seated, your knees should be slightly lower than your buttocks. If you can't adjust your chair to achieve this, put a wedge-shaped piece of dense foam on the top of your seat cushion
- Never, never cross your legs. It is common practice in western society and can cause all kinds of problems
- Change position regularly. Get up and walk around. Long-term sitting is ruinous to your health. It puts tension on the hips and knees and pressure and compression on the skeletal system - and it inhibits normal breathing