

THE ERGONOMICS OF BEING MOBILE

ERGONOMIC CONSIDERATIONS FOR LAPTOP USERS AND EMPLOYERS

Portable computers landed in our laps during the early 1980s. Called the laptop, they were promoted as a new executive tool with the weight and size to make them portable. Little consideration was given to the postural demands on the user of a keyboard that was hinged to the screen. "Small was good" even if that brought new challenges for adult fingers.

When laptops first came onto the market they were for executives on the move and expected to be used for short periods of time. Laptops are designed first and foremost to be portable, not for the ergonomics of use for long periods. Now of course laptops are integral in the busy lives we lead. They are used in dedicated home offices, the kitchen, the car, the train and when we travel.

With the convenience of laptops there is also a health cost from prolonged use in the form of neck, low back and arm pain. A study in the UK found that users of laptops for an hour or more had a high reporting of forearm pain while almost 75% of those that used a laptop for 4 hours or more a day reported back pain.



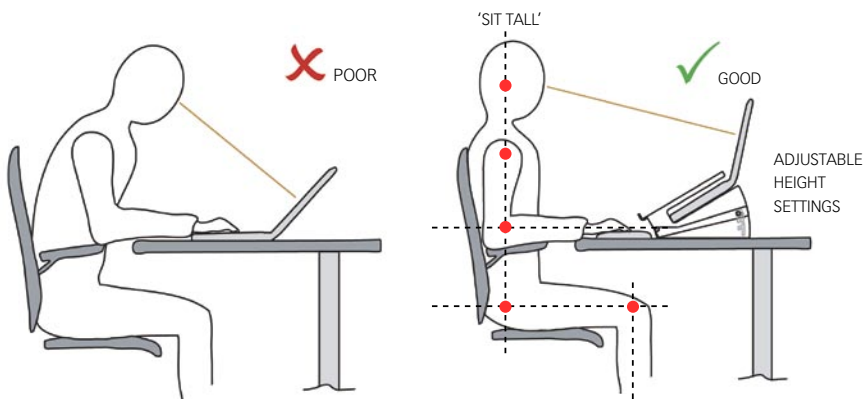
SO WHAT ARE THE IMPORTANT MESSAGES FOR LAPTOP USERS?

We need to use laptops ergonomically.

The good news is that the solutions are simple. Where possible, a docking station or port replicator bar and peripheral keyboard and mouse are recommended. The laptop user has only to raise and tilt the screen and attach a peripheral keyboard and mouse to give themselves the flexibility to be comfortable while working.

The screen should be raised to avoid neck bending and therefore the keyboard cannot be used easily. Using an infrared or other peripheral keyboard and mouse allows the user to place the screen slightly further away which is more comfortable for the eyes. The eye to screen distance should be around 600mm.

Using a plug in mouse gives the user the opportunity to work with the shoulders relaxed and elbows by the body, where fatigue is much less. The screens of laptops are usually smaller than desktop computers. Given a choice it is preferable to buy as large a laptop screen as possible. This has the advantage of providing larger keys also, however the disadvantage is the greater weight involved.



When carrying your laptop, look at using a purpose-designed laptop backpack over a briefcase or shoulder-slung bag as they are more ergonomic when worn with both shoulder straps.

WORK SCHEDULES AND BREAKS

In the peace away from the office it is easy for time to slip past. The posture required for keyboard work is relatively fixed or static which inhibits blood flow and movement, both of which improve concentration and reduce fatigue. As a guide short and frequent 'refresh pauses' are beneficial for the eyes, neck, back, shoulders, arms, hands and fingers. How you schedule pauses depends on your work habits and comfort threshold. Some people prefer to use a stretch software to remind them to change posture and stretch. On the whole this is an area where we can all improve and the research is quite clear – short and frequent breaks enables better concentration and comfort over longer periods. It is important to acknowledge discomfort and take action to improve posture, movement variety and refresh pauses before it becomes worse.

And for men who use their laptop in bed — be aware. Recent research indicates that resting a laptop on the lap can raise the scrotal temperature significantly (by 2.7 degrees) which can have adverse effects on the fertility of young adults and teenagers.

WHAT SHOULD EMPLOYERS CONSIDER?

Does your organisation's OHS Policy adequately manage the use of laptops and postural issues?

Employers should be aware of their responsibilities under Health and Safety regulations to provide a safe and healthy place of work. In the case of laptop users, this may mean their vehicle or home.

Employers need to develop a policy to cover the health and safety issues similar to those for desk top computers as well as important issues such as confidentiality, security of data equipment and the health and safety of children or others who may be present when using the laptop.

OHS POLICY

ISSUES TO CONSIDER IN A LAPTOP POLICY:

- Health and Safety in the "workplace", home, vehicle or other
- Working posture and work zones
- Work schedules and breaks
- Data protection and confidentiality
- Security and insurance
- Assessment of risk
- Control of risk
- Employees education of laptop issues
- Reporting processes for Health and Safety issues around laptop use
- Use of headset for prolonged telephone calls
- Provision of plug in peripherals, ergonomic laptopstation & work chair

Mobile solutions

Our range of lightweight ergonomic aids including laptop stations, small form factor keyboards and mice will see you 'sitting tall' no matter where you are.

