## **Laptop ergonomics**

Laptops are a popular and often necessary addition to the traditional office - for those who need portability, they are a time-saving way to bring the office with you. However, the attributes that make laptops so portable also create ergonomic hazards that users should be aware of.

The main concerns with laptop use is the fact that the keyboard and the screen are contained in one unit. This goes against the ergonomic principle that the keyboard should be located at elbow height, and the screen at eye level. Although new technology has improved laptop screen viewing, they are still not optimal, especially for full-time users.

## Setting up a laptop "workstation":

Using a laptop in an awkward posture for over 1-2 hours can cause temporary discomfort, and prolonged or repeated use can cause musculoskeletal injury. It is important to be aware of when "a few minutes" is up.

For **short-term use**, for example while travelling or checking in while out of the office, the following quick tips can help to improve comfort:

- Sit in a comfortable chair that supports your back, preferably one that reclines slightly.
- If the laptop is on a table, try to position it so that your wrists and elbows are in a neutral position. Avoid high counters or tables if you are sitting consider standing at a suitable counter if needed.
- Tilt the screen away from you, to place it in line with your natural line of sight it is usually necessary to tilt the neck slightly. Try to work in an area that limits glare on the screen.

For *long-term use*, the following steps should be followed to avoid discomfort or injury:

- At a minimum, place the laptop on a work surface that allows your wrists, elbows and shoulders to remain in a relaxed and neutral posture.
- Tilt the screen to your line of sight. Better yet, plug in an external monitor or keyboard and mouse to separate the two components.
- Position all components correctly using a monitor riser, laptop holder or keyboard platform, according to the office ergonomics guide.

Laptop docking stations are another way to accommodate and improve ergonomics. They serve to position the laptop at an angle that elevates the screen, but keeps the keyboard at a reasonable angle. When using a platform, it is important to be able to rest the elbows and forearms on a work surface.

## **Transporting your laptop**

Carrying a laptop, plus accessories, peripherals and documents can lead to handling of heavy loads. It is important to properly store and transport your laptop to avoid heavy and/or frequent lifting and carrying.

Transport your laptop in a carrying case - a shoulder bag is suitable for loads under 10 lb, however for heavier materials, a backpack type will distribute weight evenly over the shoulders while leaving your hands free. Depending on the additional items you require, consider using a rolling case with extending handle for heavier loads or when transporting over long distances.