



# LESSON 58 – HEALTH AND SAFETY

# Health Effects of ICT



## 1) Eye-Strain

- One health issue that can occur after using computers for a long time is **eye-strain** (tiredness of the eyes).
- This is caused by looking at a **monitor** which is a **constant distance** away. The muscles that focus your eyes do not move, and so get **tired** and **painful**. Eye-strain can also cause **headaches**.
- Prevention:
- **Look away** from the monitor at **regular intervals** – re-focus on distant or close objects to exercise the muscles in the eye.
- **Take regular breaks.**
- Use an **anti-glare filter** in front of the monitor to cut down on screen reflections that can also tire the eyes.

## 2) Back and Neck Ache



- Many people suffer from **back and neck pain** after working at a computer for a long time. This is usually due to them having a **bad sitting posture**.
- **Prevention:**
- Use an **adjustable, ergonomic chair**, and take the time to **set it up properly**.
- The computer **keyboard** and **monitor** should be at the **correct height** for the seated person (keyboard lower than the elbow, top of monitor at eye level).
- **Take regular breaks:** get up, walk around, stretch your muscles

### 3) Repetitive Strain Injury (RSI) in Wrists and Hands (Carpal Tunnel Syndrome & Cubital Tunnel Syndrome)

- Any **repetitive** movement (same movement over and over again) can result in a health problem called **repetitive strain injury (RSI)**.
- In particular, **typing** and using a **mouse** for long periods are common causes of **RSI** in the **wrist** (it is often called **carpal-tunnel syndrome**).
- Typing can cause wrist pains
- Clicking using mouse can cause pain in the finger
- Text messaging using mobile phones/PDAs can cause thumb pain
- Holding mobile phone with bent elbow causes pain in the elbows – **cubital tunnel syndrome**



# Prevention

- ⦿ This problem can be solved:
- ⦿ Use a **wrist-rest** to support the wrists while typing and when using the mouse.
- ⦿ **Take regular breaks** from typing or using the mouse.



# Safety Issues with ICT



- Trailing Cables
- Computer equipment is often connected to lots of **cables**: power, network, etc.
- If these cables are laying on the floor, they can cause people to **trip** over them
- *Solution: Place cables inside  **cable ducts**, or **under the carpet / flooring***

# Spilt Drinks or Food



- **ELECTROCUTION**
- If any **liquids** are **spilt** on electrical equipment, such as a computer, it can result in **damage** to the equipment, or an **electric shock** to the user.
- *Solution: Keep drinks and food **away** from computers*

# Overloaded Power Sockets

- Plugging **too many power cables** into a socket can result in the socket being **overloaded**, overheating, and a **fire starting**.



- *Solution: Never plug **too many cables** into a socket. Always make sure there are **fire extinguishers** nearby*



# Heavy Objects Falling

- Many items of computer equipment are very **heavy**: CRT monitors, laser printers, etc. Heavy items can cause serious physical injury if they fall on people (feet or legs).



- Solution: Make sure equipment is placed on **strong tables / shelves***