

Grade 10

Social Implications Lesson 1: Ergonomics and health issues



GAUTENG
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

Kuyasheshwa - "Gauteng working better"

RSI – Repetitive Strain Injury

- This group of injuries affect the tendons
- Caused by repetitive strain, especially where people are repeating the same motion for longer than two hours a day
- The longer you work with computers this way, the worse the effect can become
- Think about continuous texting, playing games etc.
- Can require medical treatment and even surgical intervention

CTS : Carpal Tunnel Syndrome

- Example of RSI
- Caused by inflammation of the wrists.
- Causes pressure on the nerves in the wrist, causing a pins and needles feeling which can be very painful.
- Often requires surgical intervention
- Similar to tendonitis, which is also caused by RSI

Other negative effects

- Caused by forcing our bodies into uncomfortable positions for hours on end
- Headache, backache and sore eyes are common complaints
- Can cause problems with digestive system
- Extreme cases where physical activity is limited for long periods of time can even cause hypertension, diabetes and pose an increased risk of heart disease

Furniture / devices designed to help

- Keyboards with a more curved or 'split' design rather than the uncomfortable, generic square design promote a more natural position of the wrists
- This allows you to turn your palms slightly outward, rather than keeping them flat relative to the keyboard

Furniture / devices designed to help

- Computer mouse design also changed to fit the hand more comfortably, as we spend long hours with our hands on them
- Computer monitors, especially the flat screen variety, are designed to reduce 'glare' and thus minimize strain on eyes
- Specially designed chairs support your back and helps you to sit in the correct position

Ergonomics

Ergonomics refers to:

- the study and design of the workplace to maximise productivity and safety by removing factors causing pain and discomfort.
- the art of designing products that 'fit' to our bodies, rather than forcing our bodies to fit an environment it is forced into.
- the study of the human body in order to identify and remove pain causing factors, and find out where support is necessary

General good practice

- Maintain good posture in front of computer – don't slouch or hunch
- Adjust chair so that your elbows and wrists are level with each other on the desk
- Make sure the mouse is close to the keyboard
- Position monitor in order to avoid straining your neck and shoulders to be able to see it

General good practice

- Ensure good lighting and ventilation
- Take regular breaks
- Rest your eyes as frequently as possible by looking away from the screen and focusing on something else