# **Ergonomics**

Ergonomics is the science that facilitates long-term worker health and safety. The goal is to minimize (reduce) the risk of occupational injury and/or illness.

Cumulative Trauma Disorders are most common among our team members.

Definition - Harmful and painful condition caused by overuse of overexertion of some part of the musculoskeletal system, often resulting from work-related physical activities. You may experience inflammation, pain, or dysfunction of the involved joints, bones ligaments, and nerves.

The three primary risk factors for cumulative trauma disorders:

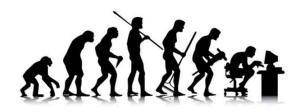
- 1. Repetition
- 2. Posture
- 3. Force

#### Easy reach zones:

- Zone 1 15 inches for frequently used
- Zone 2 24 inches for less frequent
- Zone 3 >24 inches for seldom used

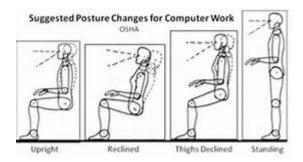
#### Interesting Facts:

- 1. Wojciech Jastizebowski (1799-1882) Polish educator and scientist. Introduced term ergonomics. Greek words ergon meaning "work" and nomos, meaning "laws".
- 2. The average computer user makes 30,000 eye movements a day. Every day your eyes take a 50 mile hike. Blink Breathe Break: Micro breaks look at a distant object every 10-15 minutes.
- 3. First Long Term Sitters:
  - Riders of oxen, camels, horses or donkeys were the earliest long term sitters.
  - Sat with good posture, well balanced upper body due to:
    - shape of saddle
    - use of leg and core muscles



Your chair is your most important piece of office equipment. You may spend up to 12 hours a day sitting, commuting, and dining. Regardless of how good your working posture is, working in the same posture or sitting still for prolonged periods is not healthy. You should change your working position frequently throughout the day in the following ways:

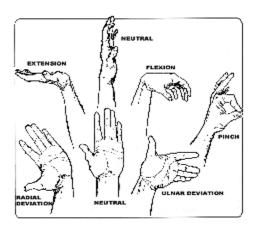
- Make small adjustments to your chair or backrest.
- · Stretch your fingers, hands, arms, and torso.
- Stand up and walk around for a few minutes periodically.



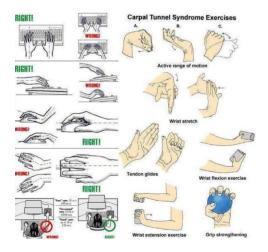
### Car Survival Tips:

- Be conscious of sitting habits
- Try to change them
- Examples
  - Leaning to one side
  - Resting on one elbow
    - Left leg in external rotation
- STRETCH!
- Vary seat position as much as possible
- Maintain safe distance between you and the steering wheel
- Use a lumbar roll or cushion from time to time.
- Entering/Exiting Vehicle:
  - Try to move both legs together. Be especially careful to put both feet on ground prior to standing up.
- Loading/Unloading trunk or rear seat:
  - Gain leverage by leaning against the bumper or frame, use one arm for support and pull the load closer.

Avoid Awkward Postures of the Wrist: The neutral posture of the wrist is when the wrist is held in a straight to slightly extended position (the knuckles slightly higher than the forearm such as in a handshake).



## Wrist exercises and stretches



Listen to your body; its physical sensations of pain or discomfort and changing either you, your environment or both so as to eliminate the pain.