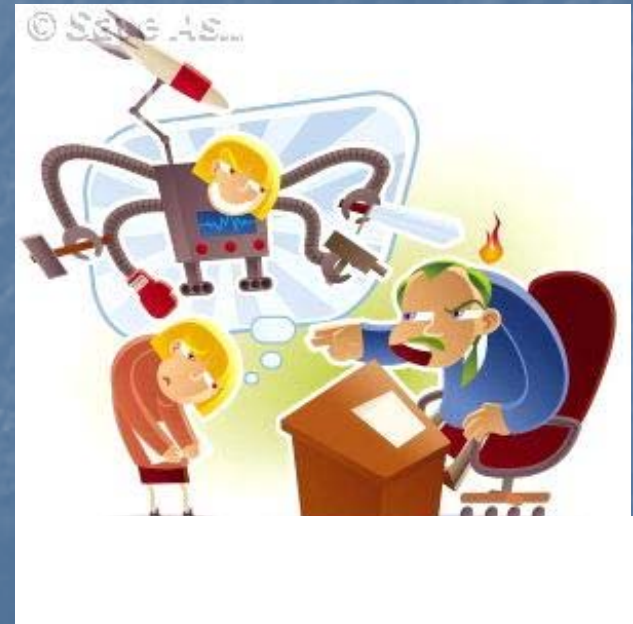
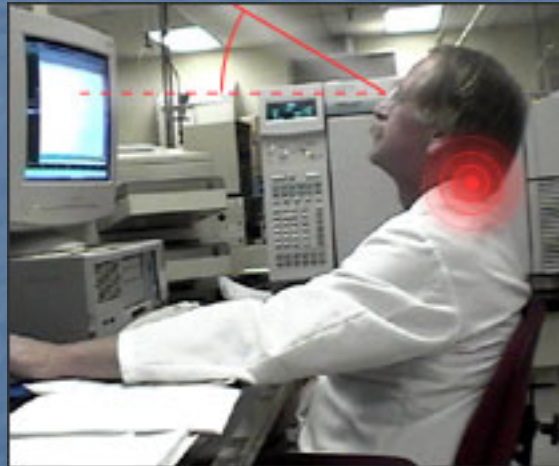


Maine State VDT Law

- Maine VDT Law- 2 or more terminals at a location, 4 or more consecutive hours computer use.
- Training: 30 days of initial hire then annually.

Office Ergonomics – science that deals with physical and psychosocial aspects of the workspace (how the workspace is fit to you, job satisfaction, job stress, and organizational support



What are Work-related Musculo-Skeletal Disorders (WMSD's)

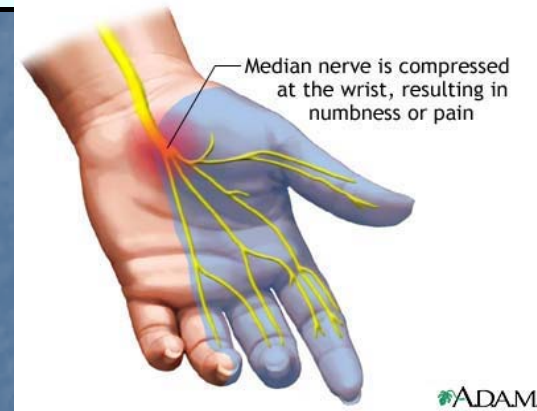
- Also known as:
 - Cumulative Trauma Disorders
 - Repetitive Strain Injuries
 - Overuse Injuries
- Usually develop gradually, but sometimes can appear suddenly
- Can be serious, if not taken care of early

Test Your Knowledge

- I F CTD stands for Carpal Tunnel Disease.
- I F CTD includes repetitive motion and static posture strains.
- I F Computer use has little effect on the eyes.
- I F A good chair is one that provides support, fits you, and is easy to position.
- I F Stretching throughout the workday will not reduce the risk of a muscle strain injury.

CUMULATIVE TRAUMA DISORDER (CTD)

- CTD targets
Muscles...Tendons...Nerves...Blood
Vessels
- CTD occurs over a period of time:
Days...Months...Years...



Today, We will look at



- Risk Factors
- CTD
- Symptoms
- Life Away From Work
- Most Common Operator Complaints/ Eyes/ Static Postures
- Work Surface
- The Chair
- Stretches

Risk Factors

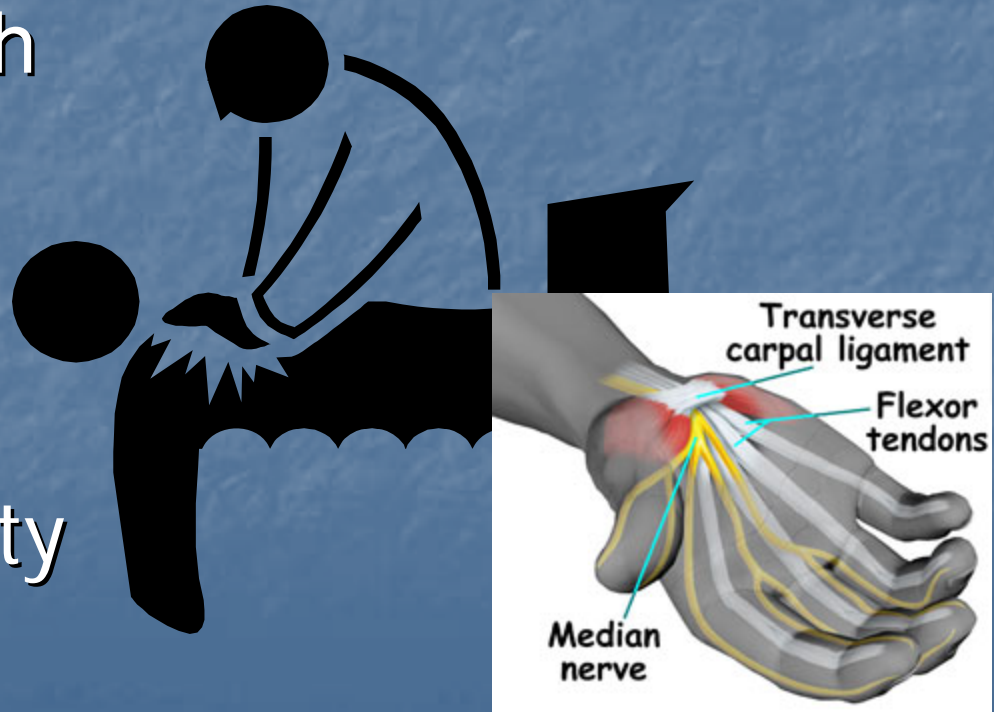
- Repetitive Motion
- Forceful Exertion
- Postures, Awkward and Static
- Mechanical Pressure

- Stress
- Hormonal Changes
- Nutritional Deficiencies
- Smoking

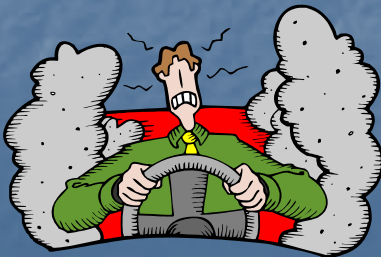
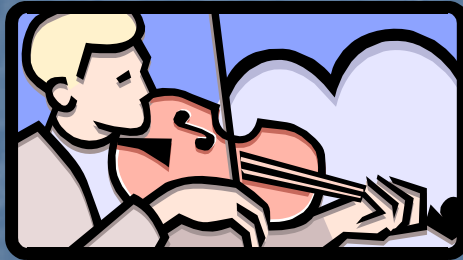


SYMPTOMS

- Discomfort or sensation of fatigue
- Perception of increased fatigue
- Decreased strength
- Pain
- Redness
- Swollen Areas
- Decrease in mobility



How Does Your Off-Work Time Affect Your Risk?



- Crafts
- Musical Instruments
- Sports
- Gardening
- Driving
- Home Computer Use
- Family

MOST COMMON OPERATOR COMPLAINTS

- Eyes: Fatigue, Watery Eyes, Blurred Vision
- Headaches
- Muscles: Pain, stiffness, or numbness in:
 - Neck and shoulders
 - Hands, wrists, arm
 - Back and legs



Taking Care of Your Eyes

- Work should be performed 'arm length' distance away from the computer- 18-30 inches.
- Adjust the screen color, contrast, font
- Refocus your eyes by looking away from the computer regularly
- Schedule an eye exam
- Use computer glasses

MINIMIZE GLARE



- Place monitor 90 degrees to window
- Use 'natural' lighting, both task and overhead
- Install drapes or blinds
- Try a glare screen
- Evaluate walls for reflective glare



Match Static Posture with

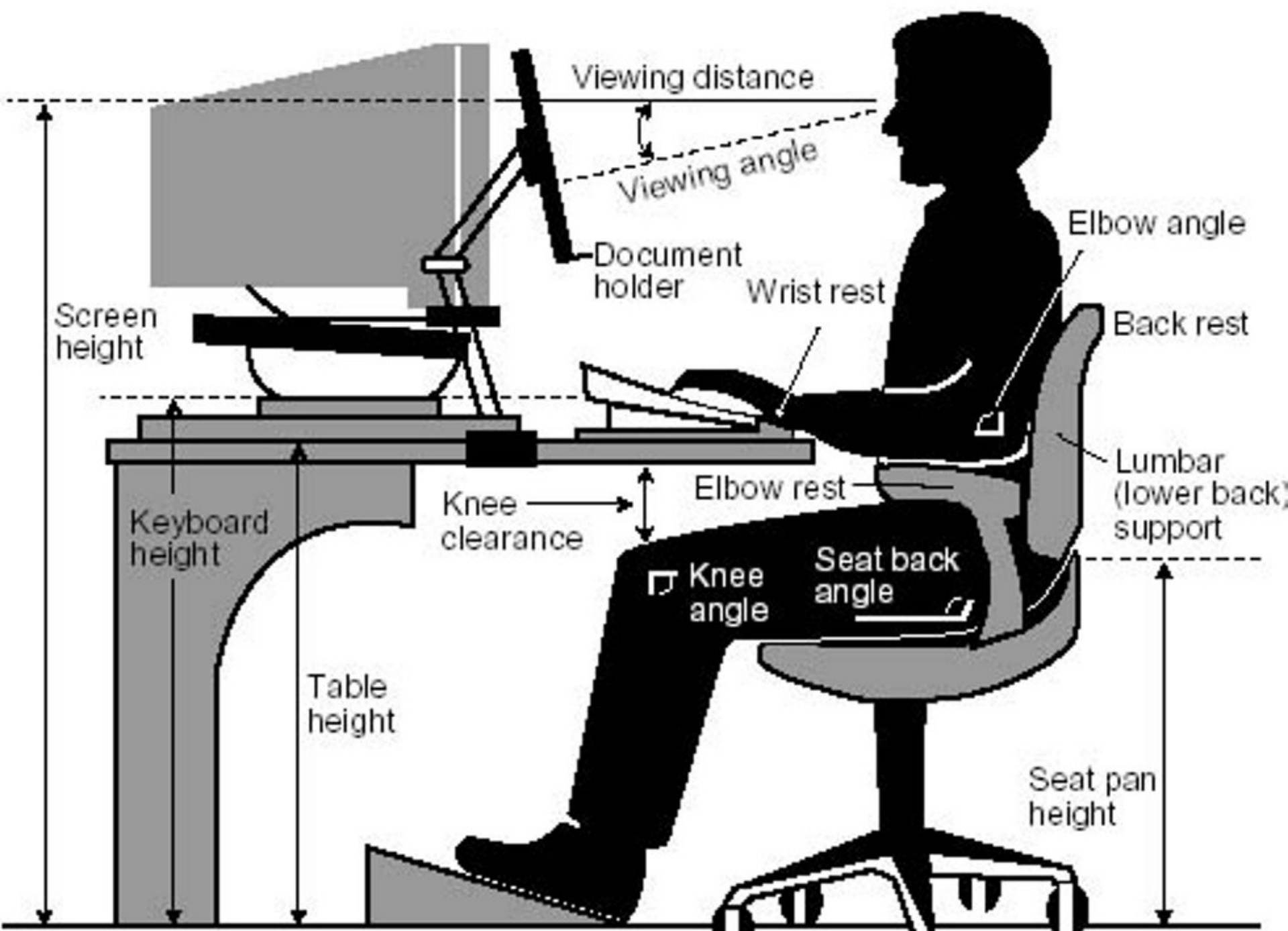
Solution

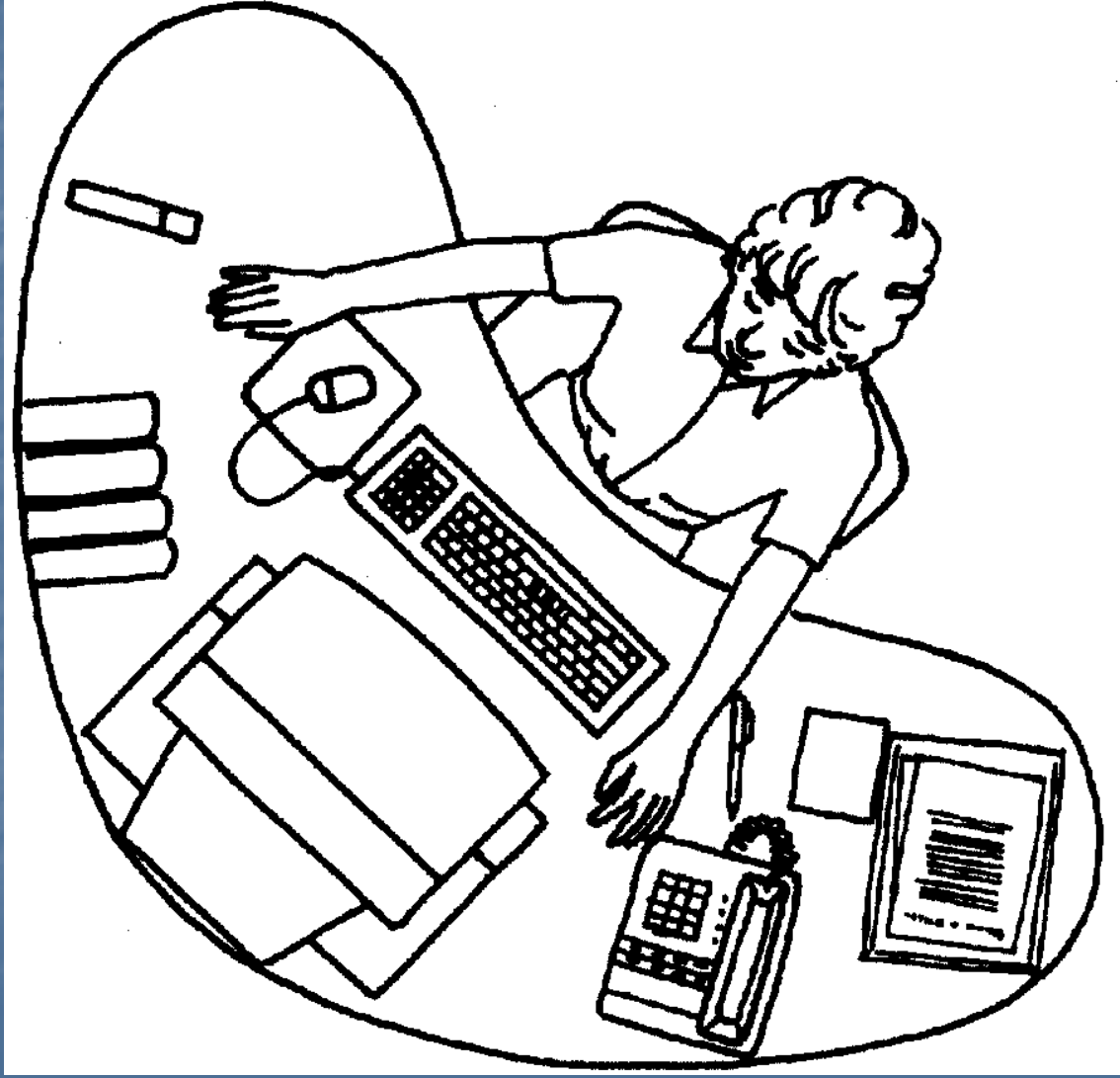
(can be more than one choice)

- **A.** Arms/ hands extended from the body
- **B.** Working bent over or with neck flexed
- **C.** Sitting without back support
- **D.** Prolonged Standing in one place
- **E.** Working in cramped or constrained postures
- ___ Foot rests, shift weight
- ___ Well designed, adjustable, supportive seating
- ___ Work surfaces at appropriate height
- ___ Routine stretch breaks
- ___ Head Phones
- ___ Arms in neutral position, kept close to sides
- ___ Change!

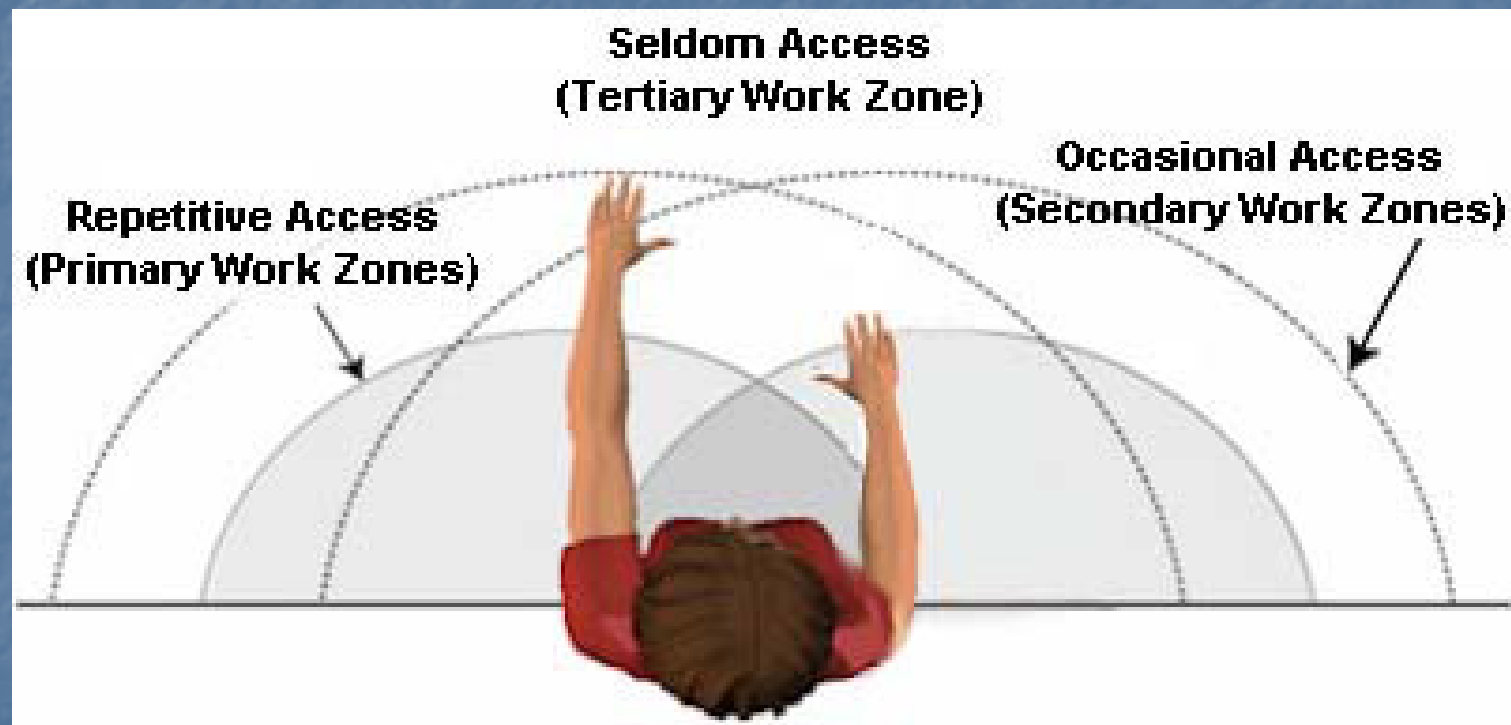
WORK SURFACE





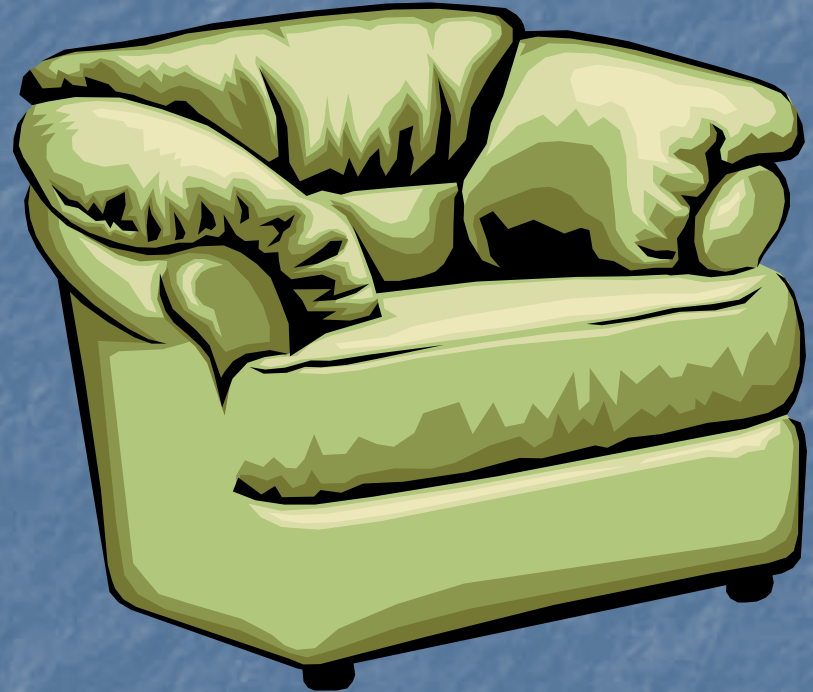


Not everyone will have the same desktop placement of needed items. What do you need access to the most?



THE CHAIR

- The right size-
 - pan and back
- Backrest/ lumbar support
- Adjustable Height
- Armrests- removable/ adjustable
- Foundation
- Good condition



Get to Know Your Chair!





What about this chair?





**Evaluate this
workstation**



Evaluate this
workstation

LAPTOPS

Design of Laptops

- Laptops were designed to be portable
- Keyboard and screen are small, increasing risk of muscle strain
- Eye fatigue is also increased due to size and quality of screen
- Screen is usually not adjustable, resulting in neck strain if not adjusted
- Transport- the AMA recommends that no more than 15% of body weight should be carried.

What to do?

- Use external devices: keyboard and mouse, remembering the neutral position.
- Raise the laptop: Place on a stand, book, or other raised surface.
- Obtain a docking station
- Ensure proper seating: Use a chair that supports your body.



Transporting Laptop

- Carry only the essential laptop accessories, including external mouse
- Use a padded bag, and a wheeled luggage cart
- Look for laptop friendly work surfaces- place in lap if none is found
- Never leave in open view in your car, or unattended in a public place.
- Back-up documents frequently

VDT Survey Exercise

WORK & REST



- **RECOMMENDED:**
 - 2 – 5 MINUTES EVERY HALF HOUR
 - 5 – 10 MINUTES EVERY HOUR
 - 15 MINUTES EVERY TWO HOURS

STRETCHES

- Restores circulation and works muscles not used when keying.
- Part of a holistic program.
- NEVER stretch to the point of discomfort
- Can aggravate existing problems
- Check with your physician!

Seek Other Ways to Stretch

- Use the stairs
- Park a distance away
- Walk at lunch
- Routine aerobic exercise
- Move the printer off the desk



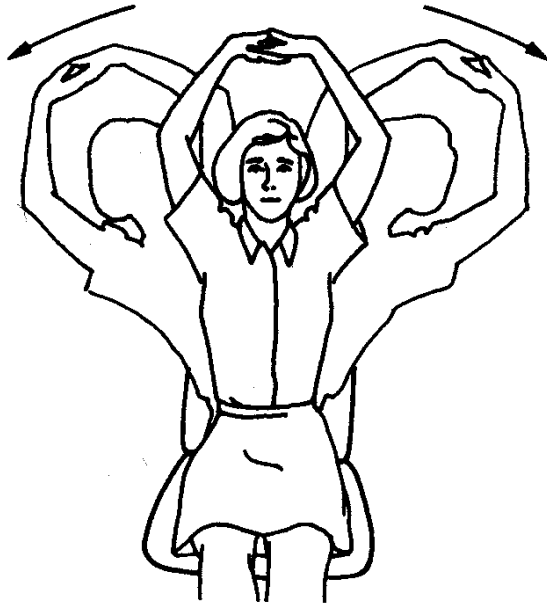
Hands And Wrists

- ◀ Make a fist with each hand, and then open it, spreading out your fingers as far as you can.





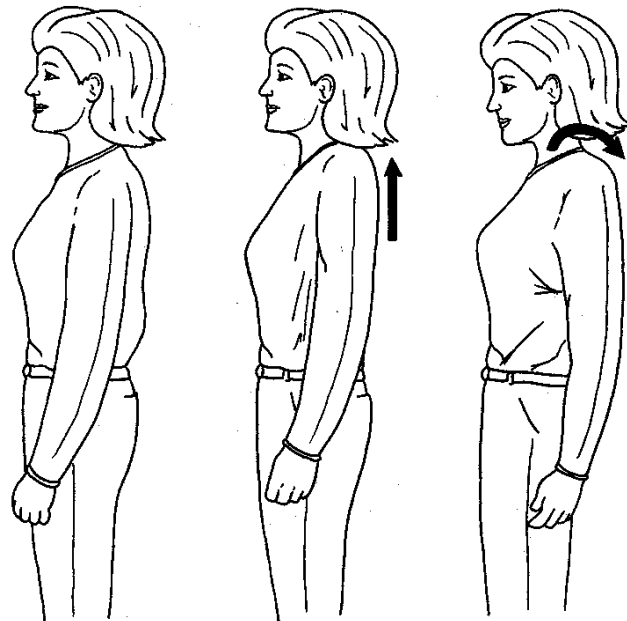
◀ Place your palms together in front of your chest. Keeping them together, slowly lower your hands until you feel a mild stretch in your forearms.



Shoulders, Arms And Torso

- ◀ Reach overhead with your arms as far as you can, and hold them stretched upward for a few seconds. At the same time, bend gently from side to side to stretch the muscles that become stiff while sitting.

While keeping your arms at your sides, slowly roll your shoulders upward and backward. ▶



Relaxation And Stretching Activities For The Office

Try these activities to help you relax and relieve the stress of sitting and concentrating for long periods of time. Repeat each activity 3 times, holding the position 10 to 20 seconds.

Lower Back

Place your hands on your hips, and bend back gently. ►

