

Office Ergonomics



Session Objectives

- Define ergonomics and MSDs
- Identify ergonomic risk factors
- Recognize MSD symptoms
- Set up your workstation to minimize stress and strain
- Perform tasks safely and avoid injuries and illness

What Is Ergonomics and Why Is It Important to You?

Science of fitting job to worker

Reduces exposure to MSD risk factors

Involves engineering and administrative controls

What Are MSDs?

Injuries or disorders involving:

- Muscles
- Tendons and ligaments
- Joints
- Cartilage
- Blood vessels
- Nerves



What Are the Risk Factors?

- Repetition
- Awkward postures
- Contact stress
- Force and vibration



What Are the Signs and Symptoms of MSDs?

You may feel pain or swelling in:

Hands, Wrists, or Forearms

Fingers

Elbows

Shoulders

Neck

Back

What Will the **Pain** Be Like?

Tightness

Stiffness

Discomfort

Soreness

Burning

Tingling

Coldness

Numbness



Are There Any Outward Signs?

- Swollen or inflamed joints
- Vigorous shaking of hands and wrists
- Massaging of hands, wrists, or arms
- Cradling of arms



What Are Some of the Most Common MSDs?

Carpal Tunnel Syndrome

Tendinitis

Tenosynovitis

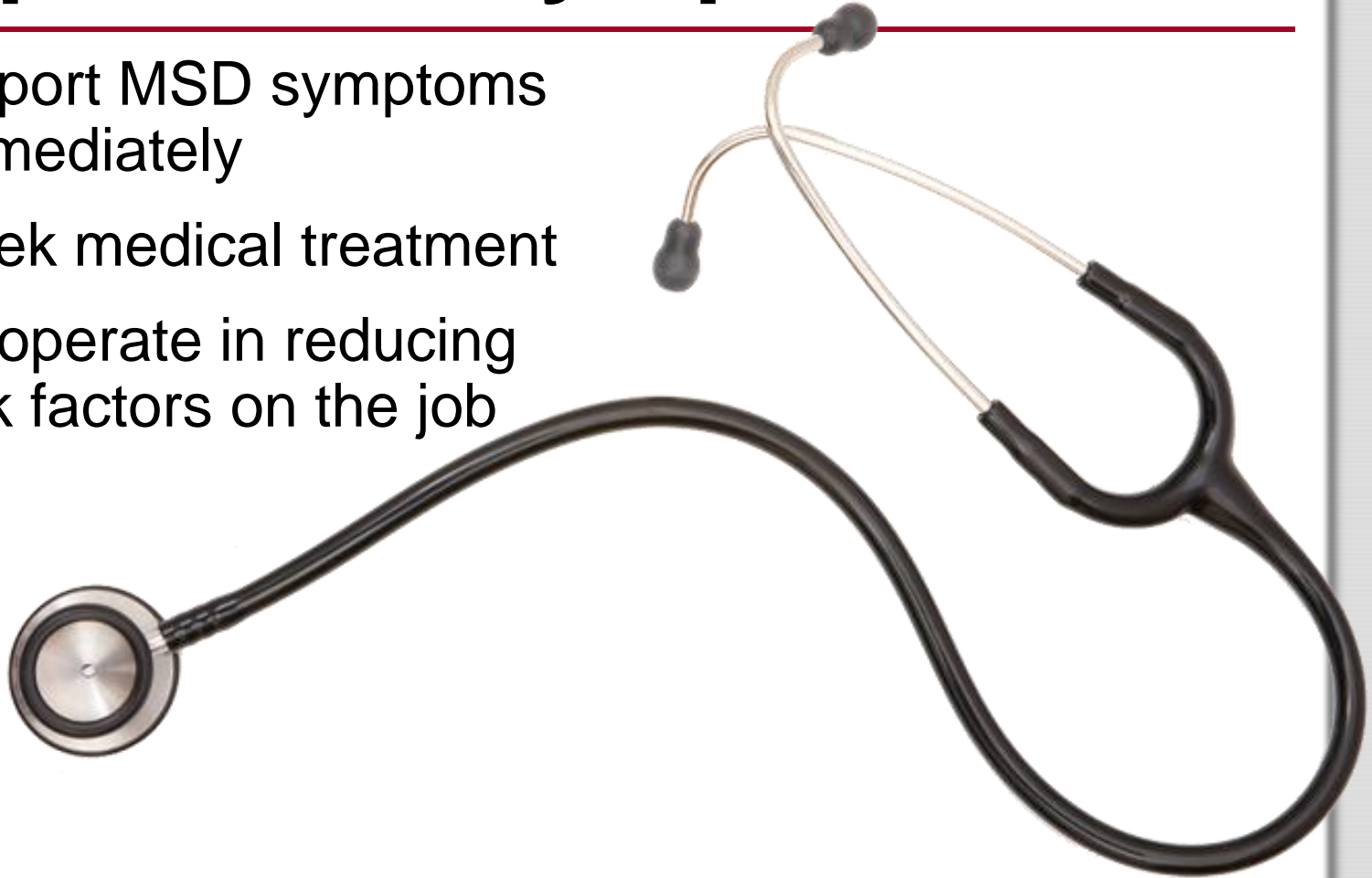
Thoracic Outlet Syndrome

De Quervain's Disease

Trigger Finger

What Should You Do if You Experience Symptoms?

- Report MSD symptoms immediately
- Seek medical treatment
- Cooperate in reducing risk factors on the job



Ergonomics and MSDs: True or False?



Ergonomics reduces exposure to MSD risk factors



MSDs affect only the wrists



An example of an engineering control to prevent MSDs is alternating tasks



Report MSD symptoms only after you've seen a doctor

Ergonomics and MSDs

Do you understand:

- What ergonomics is?
- Ergonomic risk factors?
- What MSDs are?
- MSD symptoms?
- MSDs that affect office workers?



Computer Workstation: Head and Shoulders

- Head vertical and facing forward
- Tilted head puts stress on neck and shoulders
- Minimize head rotation
- Shoulders relaxed
- Arms tucked close to body
- No extended reaching



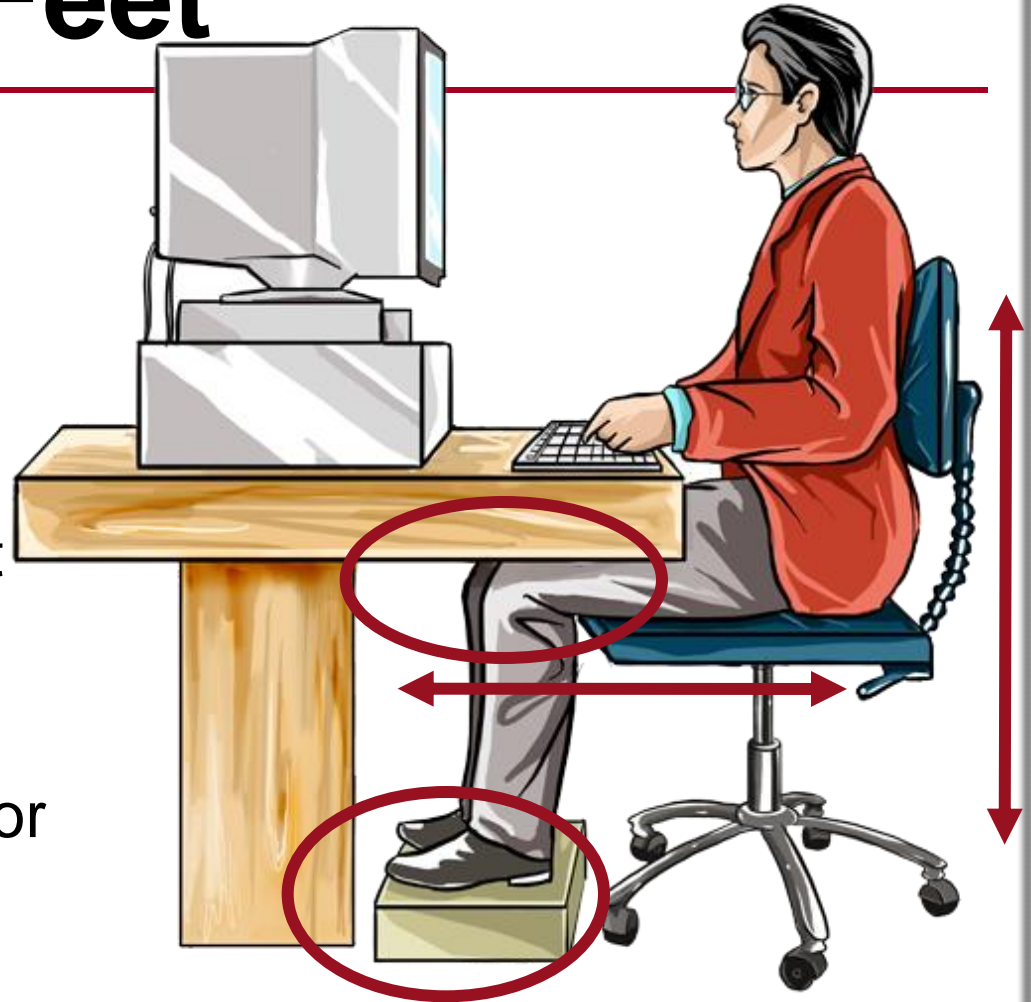
Computer Workstation: Elbows and Wrists

- Elbows relaxed and close to the body
- Elbows not extended forward or backward
- Wrists in a straight line with lower arms
- Hands not flexed up or down, or bent inward or outward



Computer Workstation: Legs and Feet

- Knees bent about 90 degrees
- Thighs parallel to floor
- Chair at a comfortable height
- Obstructions removed
- Feet flat on the floor or on a footrest



Chair Adjustments: Seat Surface

- Comfortable
- Slightly wider than hips/thighs
- Proper length
- Adjustable height
- Adjustable tilt



Chair Adjustments: Back and Arms

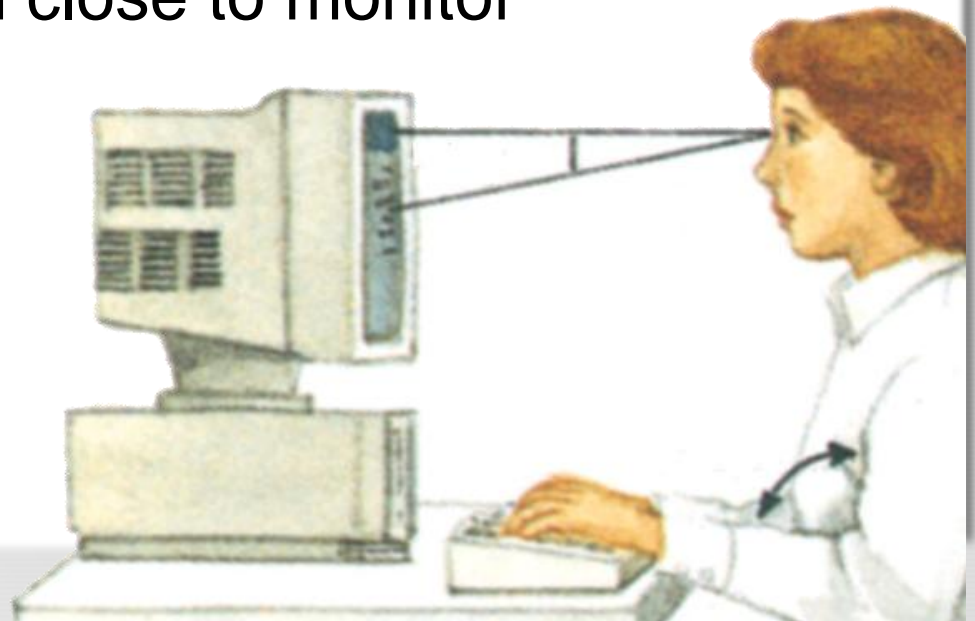


- Backrest with adjustable angle and lumbar support
- Armrest broad and cushioned to support shoulders, elbows, and wrists
- Armrests independently adjustable in height and side to side

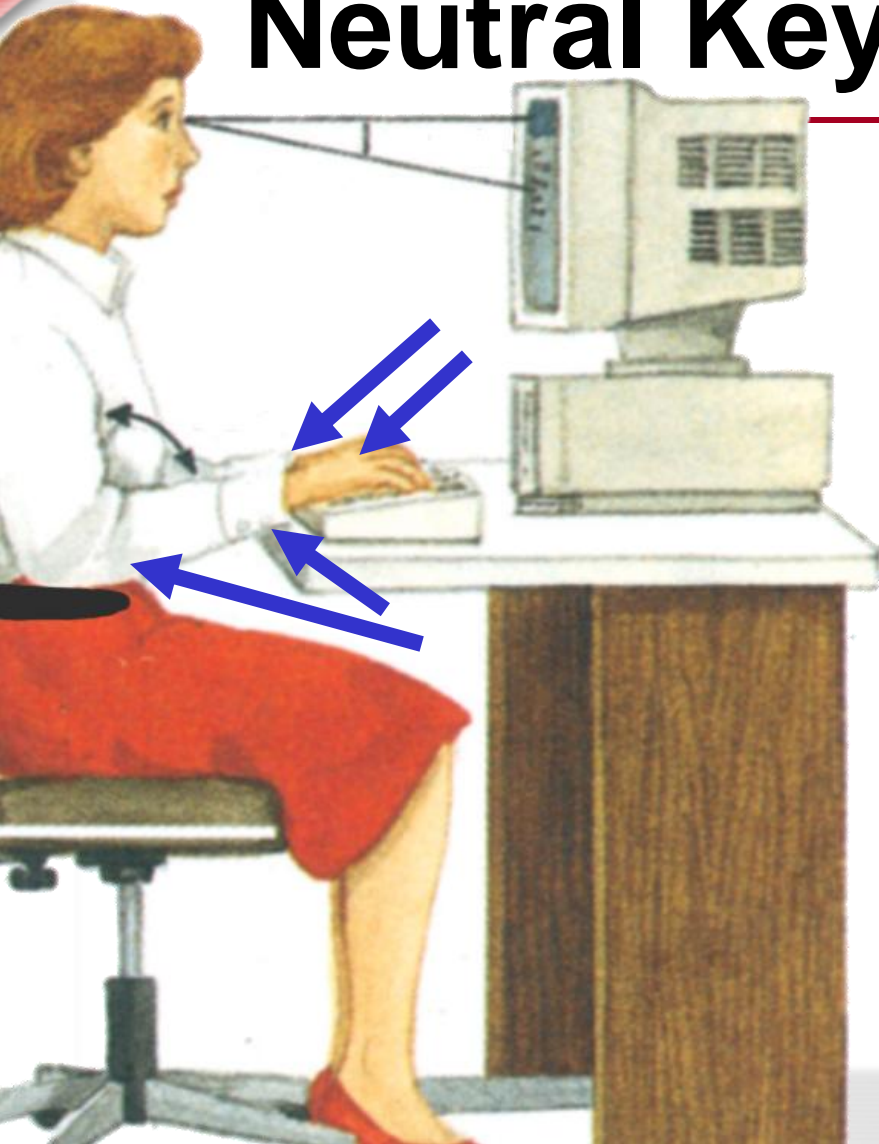
Image Credit: Ergogenesis, LLC

Computer Monitor

- Directly in front of you
- Arm's length away
- Proper height so head is level
- Documents placed close to monitor



Neutral Keyboard Position



- Elbows close to body and bent about 90 degrees
- Wrists flat and in line with forearms
- Hands not angled up/down or turned in/out
- No wristrest when typing

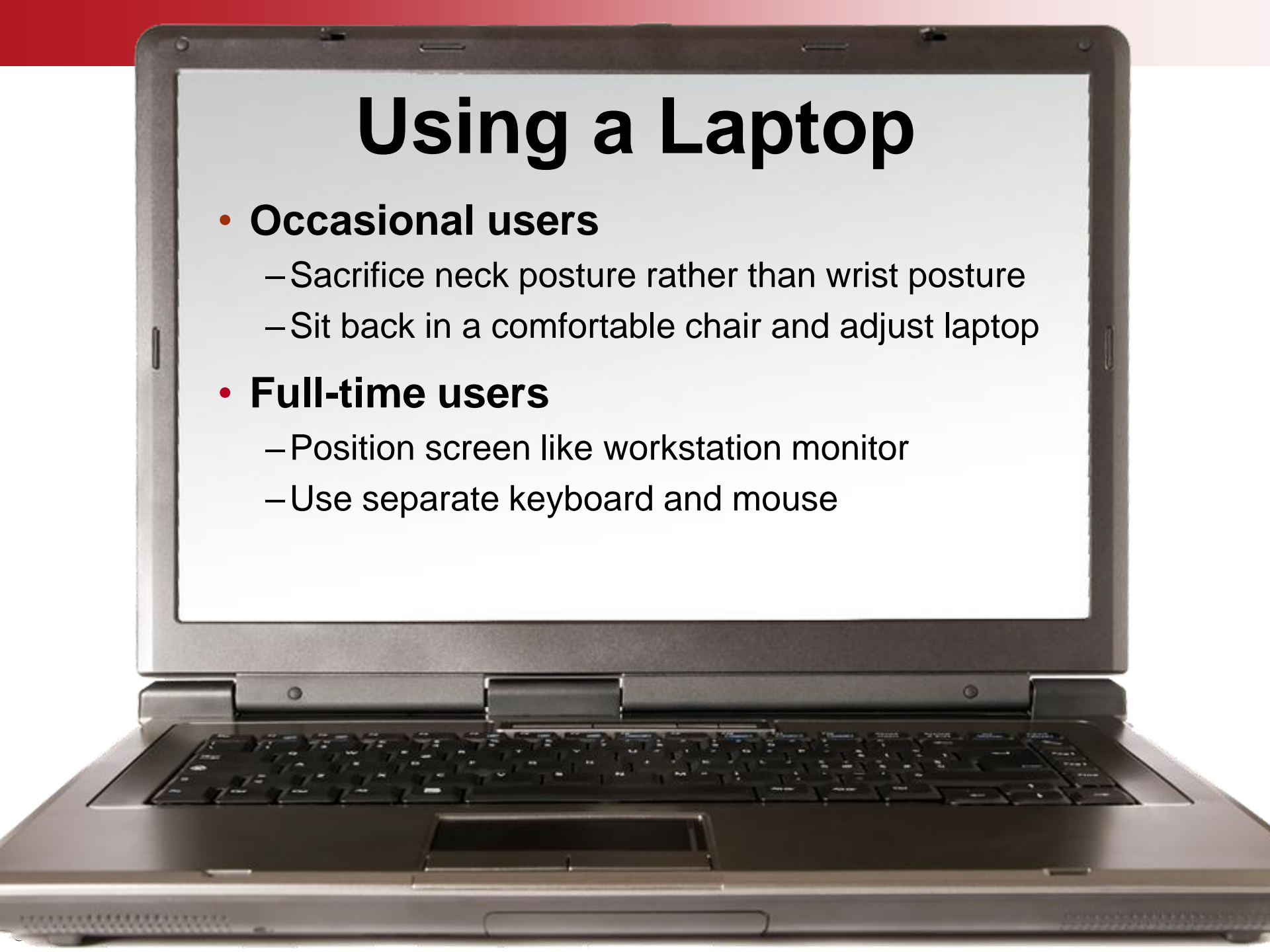
Using a Mouse

- Control mouse movement from the elbow
- Keep wrist straight in neutral position
- Position the mouse properly
- Switch mouse to other side if you feel stress



Using a Laptop

- **Occasional users**
 - Sacrifice neck posture rather than wrist posture
 - Sit back in a comfortable chair and adjust laptop
- **Full-time users**
 - Position screen like workstation monitor
 - Use separate keyboard and mouse



Break Time

Minibreak:

- Relax your hands

Rest break:

- Do a different task

Eye break:

- Look away and blink



Exercises

Hands

- Finger extensions

Wrists

- Backwards stretch

Shoulders

- Shrug and roll
- Blade pinch
- Overhead reach



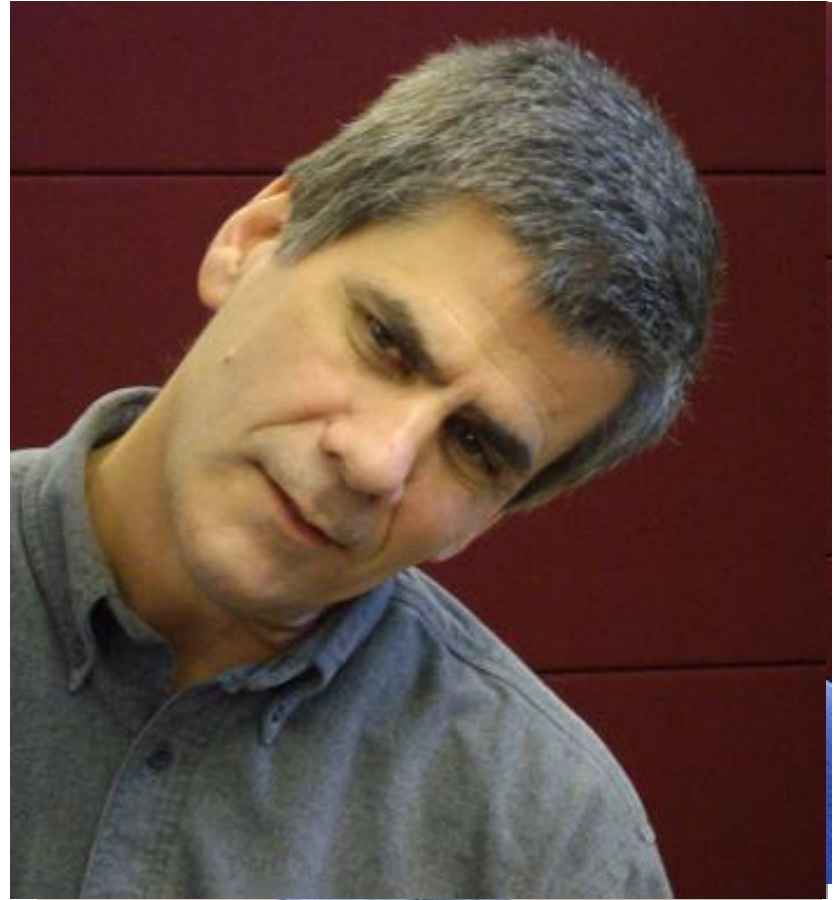
Exercises (cont.)

Neck

- Nod head
- Turn head
- Tilt head

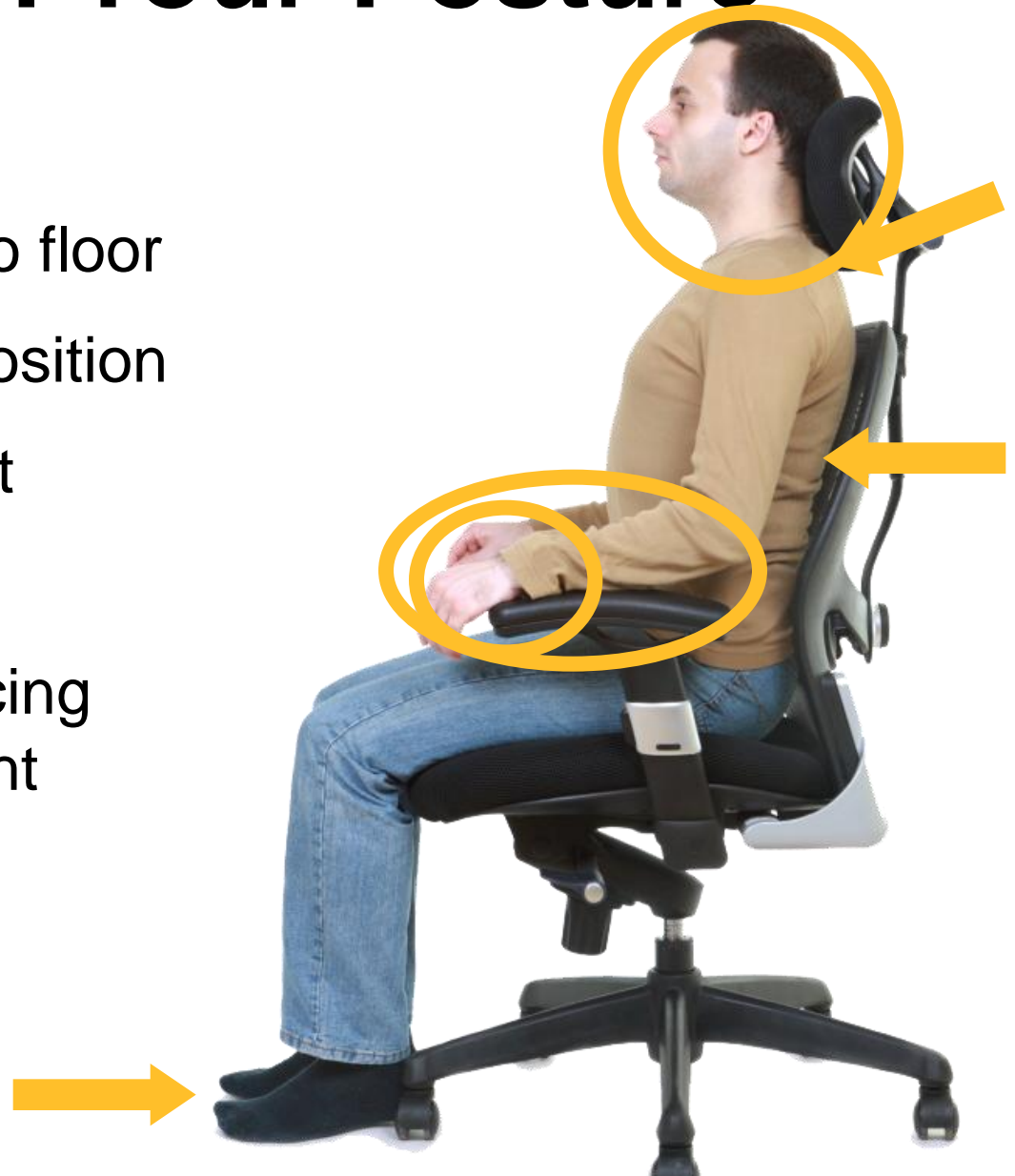
Back/arms

- Hands behind head
- Bend forward
- Knee to chest
- Back bend



Focus on Your Posture

- Elbows at sides, forearms parallel to floor
- Wrists in neutral position
- Good back support
- Feet flat on floor
- Head and neck facing forward and straight
- Relax shoulders



MSD Prevention: Pick the Right Answer

While working on the computer, elbows should be:

- a. Extended out
- b. Close to body

Computer monitor should be positioned:

- a. In front of you
- b. To one side

While you're typing, your wrists should be:

- a. Bent up
- b. Straight

Control the mouse with:

- a. Wrist movements
- b. Elbow movements

MSD Prevention

Do you understand:

- Proper computer workstation setup?
- Chair adjustments?
- Neutral keyboard position?
- Proper use of mouse?
- Tips for using laptops?
- Importance of breaks?
- Stretching exercises to relieve stress and strain?



KEY POINTS To Remember!

- Most office workers are at risk for MSDs
- MSDs are caused by stress and strain on your body while you work
- We use engineering and administrative controls to minimize the risks
- You can help by following safe work practices and reporting any MSD symptoms