

# **Safe Computing**

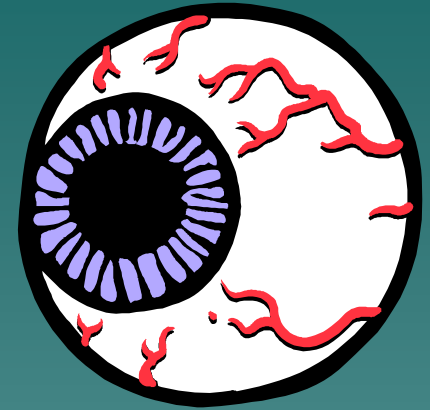
## Or What You Don't Know Can Really Hurt You!

From 25 Steps to Safe  
Computing, by Don Sellers, 1995

# The Eyes Have It!

## Eyestrain Tip-offs

- ◆ Focusing problems
- ◆ Headaches
- ◆ Eye problems during work week only
- ◆ Color confusion after computing
- ◆ WATCH OUT! -- Up to 40% of computer users have eyestrain.



# Seeing is Believing!



## Causes of Eyestrain

- ◆ Glare, reflections, bright lights, dimly lit reading material
- ◆ Changing focus distance often
- ◆ Wrong glasses prescription
- ◆ Bifocals wearers tilt their heads back
- ◆ Stress or other medical conditions

# Here's Looking at You, Kid!

## Steps to Take for Relieving Eyestrain

- ◆ Glance away from screen often
- ◆ Alternate computer work with other tasks
- ◆ Practice stress-reduction: Close eyes, breathe deeply, imagine peaceful setting
- ◆ Practice "Peeper Protection" – Yearly eye exam, good light, good monitor placement



# Oh Say, Can You See?

## OUCH!

- ◆ Computer users stare at the screen for long periods, stressing focus muscles
- ◆ They make same eye movements often
- ◆ They don't blink very much
- ◆ Screens aren't very bright
- ◆ Offices have very dry air



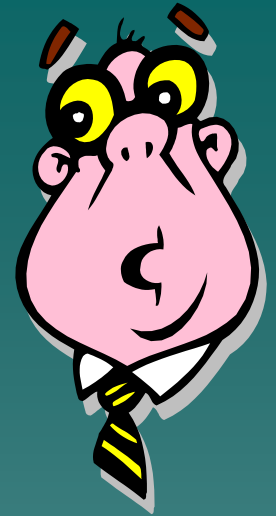
# Check It Out!

Get your vision checked if you have:

- ◆ Blurred vision or tired, burning eyes
- ◆ Frequent headaches
- ◆ Difficulty driving safely
- ◆ Poor sports performance
- ◆ Decreased interest in tasks that require close work



# Older and Wiser!



As we get older:

- ◆ Our eyes' lenses harden making near focus more difficult
- ◆ Our pupils get smaller, allowing less light to enter the eye
- ◆ Cataracts (clouding of lens) may develop
- ◆ Tear production decreases

# Hazards of Glasses!



- ◆ Most glasses and contacts aren't prescribed for computer use
- ◆ Bifocals & Trifocals cause you to tilt your head back and move your chin forward (known as the "chicken dance")
- ◆ Contacts are designed for focus 20' away
- ◆ Contact wears get dry eyes easily

# Keep Your Eye On Things!

- ◆ Steps to Take
- ◆ Get a pair of glasses for computer use
- ◆ Lower your monitor
- ◆ Increase font size
- ◆ Reduce reflections and glare
- ◆ See an eye doctor
- ◆ TAKE A BREAK!!



# How Dry Am Eyes?

- ◆ Go ahead and CRY (your eyes need the help)!
- ◆ Think to Blink
- ◆ Use lubricating eye drops
- ◆ Check if your medications cause dry eyes
- ◆ Lower your monitor (your eyes will close half-way)



# Not Now; I've Got A Headache!

Headaches can be triggered by:

- ◆ Stress
- ◆ Repetitive tasks
- ◆ Poor air quality
- ◆ Glaring lights
- ◆ Tensing head & neck muscles
- ◆ Bad posture while working on a computer



# Heading for Relief!



## What to do for headaches:

- ◆ Don't be a martyr – headaches can be signs of serious illness (see a doctor)
- ◆ Use monitor glare shields or dark glasses
- ◆ Adjust screen colors & brightness
- ◆ Try a cool cloth or over-the-counter meds
- ◆ RELAX! Stretch and de-stress.

# Don't Back Down!

- ◆ Your Mother was right – DON'T SLOUCH
- ◆ Don't lean forward either
- ◆ Don't sit with your feet dangling
- ◆ Don't twist (or you'll shout!)
- ◆ Watch for hand & arm pain, too
- ◆ Numbness, tingling, and pain in back or neck needs medical attention!



# Get Back to Basics

## Practice back safety **ALWAYS**:

- ◆ Sit sensibly (in a chair that fits you)
- ◆ Squat to pick up heavy loads
- ◆ Exercise regularly (walk or swim)
- ◆ Listen to your mother – **POSTURE** counts
- ◆ To stand for long periods, put 1 foot on a stool or phone book



# Sit On It!



- ◆ Every moment you sit, hundreds of muscles are hard at work, fighting gravity!
- ◆ Sit directly in front of your computer
- ◆ Monitors should be below eye level
- ◆ Feet on floor -- Adjust your chair if needed
- ◆ Support your lumbar with a cushion
- ◆ Arms should bend 90° to reach keyboard

# TAKE A BREAK!

At break time:

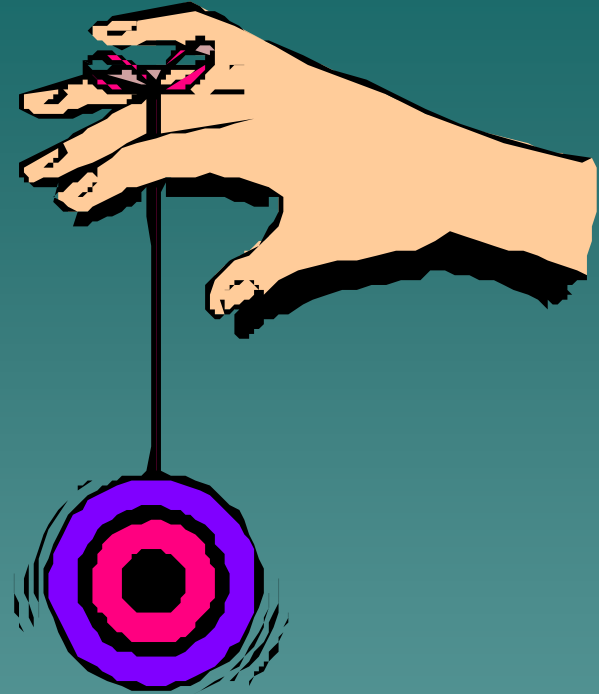
- ◆ Stand up
- ◆ Walk around
- ◆ Jump up and down
- ◆ Get some fresh air
- ◆ Stretch gently
- ◆ Put your feet up for a moment or two



# Gotta Hand It To You!

**Fact: Repetitive Strain Injuries are the fastest growing worker's compensation claim in America!**

- ◆ RSI's develop slowly over time due to repetitive movements
- ◆ It's common for several injuries to occur at once, causing multiple symptoms



# Hands Down



## Repetitive Strain Injuries:

- ◆ Flexing hands up & down at the wrist contributes to carpal tunnel syndrome
- ◆ Typing with twisted wrists causes strain
- ◆ Resting wrists on surface while typing stresses muscles in hands
- ◆ Pounding the keys hurts the fingers

# Hand in Hand

## More RSI Facts:

- ◆ Long typing sessions lead to RSIs
- ◆ Cold work settings increase risk
- ◆ Poor diet, lack of sleep, smoking alcoholism & diabetes can add to risks
- ◆ Your heredity and body physiology may make it more likely to develop RSIs



# Warning Signs of RSIs

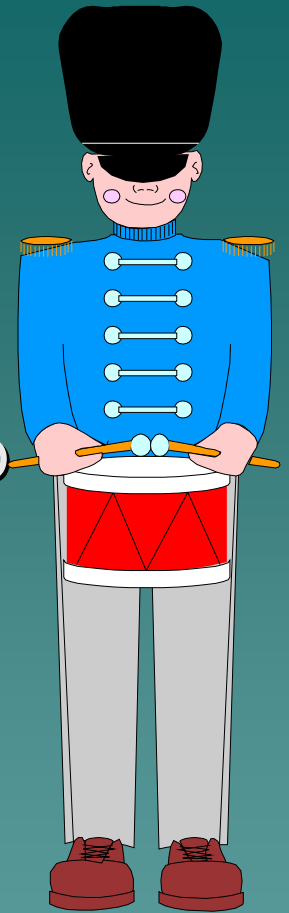
**Note: Symptoms vary. See a doctor if you have:**

- ◆ Burning pain in hands, wrists, arms
- ◆ Pain or dull ache
- ◆ Radiating pain that travels up & down the arm or shoulder
- ◆ Numbness, tingling, weakness or stiffness

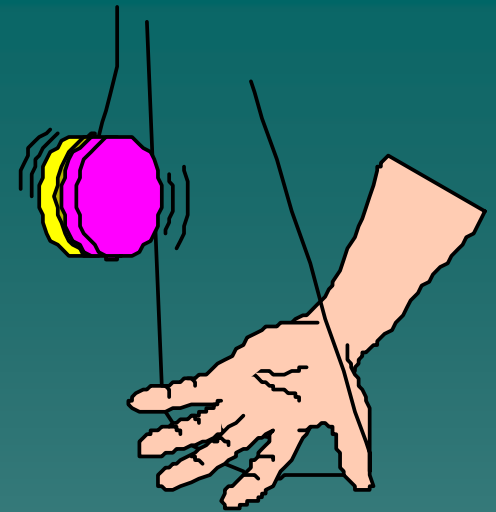


# RSI Recovery

- ◆ See a doctor
- ◆ Rest your hands, wrists, or arms
- ◆ Over-the-counter pain relievers help
- ◆ Ice or hot/cold treatments give relief
- ◆ Splints, slings, wrist rests, or exercises may be prescribed
- ◆ P.T. or surgery may be needed

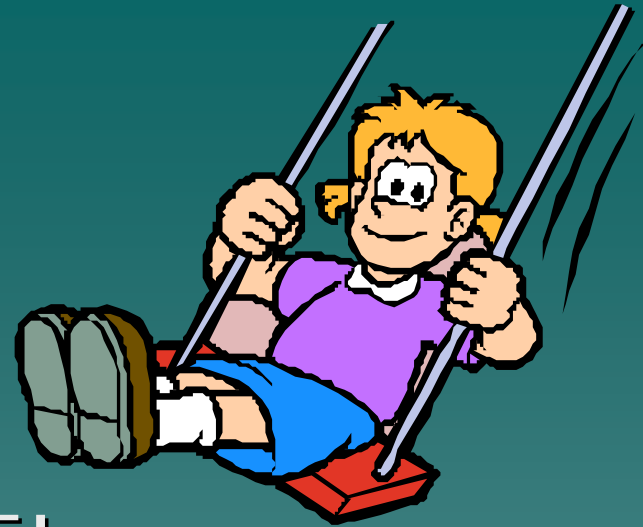


# More RSI Tips



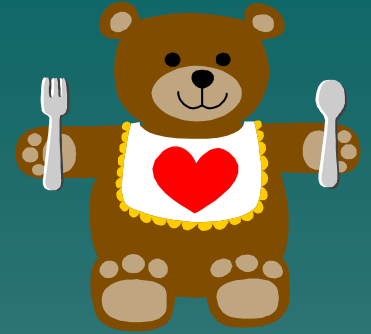
- ◆ Re-position your keyboard
- ◆ Try alternative input devices
- ◆ Change positions frequently
- ◆ Don't squeeze your mouse (it hurts your hands and annoys the mouse!)
- ◆ Arms should bend 90° at elbow
- ◆ Listen to your body. Stop when it hurts.

# Move It!



- ◆ The #1 thing to make computing safer is MOVE!
- ◆ Shift positions in your chair
- ◆ Get up and walk around
- ◆ Alternate your daily activities
- ◆ Look away from the computer
- ◆ Exercise (at a safe level for you)

# An Apple A Day...



- ◆ Computer use is hard work
- ◆ Chronic sleep disorders are common
- ◆ Stress can be hazardous to your health
- ◆ Smoking, alcohol, and drugs are linked to long-term health problems
- ◆ Be kind to yourself: A balanced healthy diet, exercise, and proper rest equal a happier, healthier life!