Ergonomics 101

Presented by: Macomb Benefits

Today's agenda

- Learn what ergonomics is and why it's important at

- Be able to detect early symptoms of problems

- Have a list of comfort tips and quick fixes to implement on your own

- Be able to assess your own work area for ergonomics

What is ergonomics?

- In simple terms, ergonomics is the study of making things comfortable for you to use
    - It is the study of fitting jobs to people
    - It recognizes that people have physical abilities, limitations and characteristics
    - It applies knowledge to work design

Why bother?

- ✓ Increases employee efficiency, productivity, quality and accuracy of work

- ✓ Reduces injuries and workers' compensation claims

- ✓ Creates happier employees

- ✓ Benefits you by contributing to your long-term quality of life

Early symptoms of strain

- ✓ Muscle aches, strains and pain
- ✓ Eye fatigue
- ✓ Tingling, numbness, aching and/or warm sensations in the hands or upper arm
- ✓ A decrease in grip strength
- ✓ Restricted breathing

What causes repetitive stress injuries?

Frequency
- Repeating the same hand, arm and shoulder motions
- Long periods of sitting and/or standing

Excess force
- Applying excessive pressure

Poor or awkward posture
- Bent or flexed wrists while typing
- Over-reaching while sitting at your computer
- Neck bent forward at greater than a 15º angle
- Unsupported back and arms and inadequate leg room/support

What causes repetitive stress injuries?

Poor lighting
- Screen glare
- Poor overhead lighting

Stress
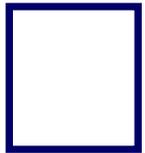- Muscles tense when stressed, which puts more strain on the body

Leisure activities
- Repetitive/forceful activities such as painting, playing tennis, knitting, gardening, golfing, etc.

Office ergonomics

☑ Assess Your Workstation

☐ Assess Your Body

Office ergonomics: the basics

Place the monitor directly in front of you while at the keyboard

Position the top of monitor screen at or below eye level and about an arms length away

Use a document holder to place source documents as close to the computer as possible and at the same height and distance

Sit with the head and neck in upright position, even while on the telephone

Keep shoulders relaxed and elbows close to the body

Position monitor to eliminate or minimize glare on the screen

Adjust the height of the chair to achieve a proper posture

Use the backrest of the chair to provide full support particularly for the lower back

Use a light touch on keyboard, keep your keyboard at elbow height

Adjust the keyboard or chair height to keep forearms, wrists, and hands in a straight line while using the keyboard

Maintain a proper posture having a 90 degree or greater angle at the hips and knees while the feet are supported by the floor or footrest

Place the mouse and other input devices next to the keyboard

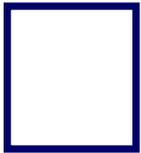Relax your shoulders and take frequent breaks

Allow ample clearance to move knees and legs under the workstation

Rest your feet firmly on the floor or footrest

Keep your elbows at a 90 degree angle and your wrists flat

Keep your thighs approximately parallel to the floor

Office ergonomics

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Assess your body

Remember the three "<u>B</u>"s!

- ✓ **Blink**
- ✓ **Breathe**
- ✓ **Breaks**

<u>B</u>LINK, <u>B</u>reathe, <u>B</u>reaks

Blink

- It is important to blink. Normally we blink 12-15 times per minute, but when we are thinking or concentrating, we tend to stare and blink less often, which is not good for our eyes.
- Allow for rest periods. A very brief break and blinking allows our eyes to rest, re-wet and clean out debris to keep our vision clear.
- Concentrate on keeping up with the normal blink rate while you work.

<u>B</u>link, <u>B</u>REATHE, <u>B</u>reaks

Breathe

- – Stressful situations can cause us to hold our breath, which tightens the muscles in our bodies, including our eyes.

- – When we breathe correctly, we are taking in even and steady breaths. This helps relax all the muscles throughout the body, which also helps the eyes.

<u>B</u>link, <u>B</u>reathe, <u>B</u>REAKS

Breaks

- Working on computers puts a lot of strain on your eyes and body. To help, you should:

  - Look away from your computer screen occasionally so that the eye muscles can flex

  - Get up and walk around because the body dislikes repetitive activity and inactivity

  - Stand up and stretch — approximately once per hour, or more frequently if possible

Assess your body

Stretch!

- Stretching exercises; hold for 10+ seconds
- Stretching shouldn't cause pain
- Never perform movements discouraged by physicians

Quick fixes: eyes

Reduce glare
- Use a glare-reducing attachment for your monitor
- Adjust window shades in your home or office
- Adjust the lighting around you

Change size of font to a larger size

Avoid using red or blue backgrounds and fonts

Reduce the angle of your work
- Adjust how close the document is to the monitor
- Adjust the position of your monitor

Give your eyes a break
- Look away several times per hour
- Blink!
- Look into getting corrective lenses, if necessary

Quick fixes: back and neck

Provide lower back support
- Try using a rolled towel or lumbar roll

Work on your posture
- Adjust your chair

Vary foot placement
- Use a box/binder to raise your feet

Watch your phone use
- Use a phone cradle
- Switch ears
- Use speakerphone
- Use a headset

Reposition your monitor
- use phone books or paper reams to adjust it

Reposition work
- Center or elevate the position of your work
- Use a document holder

Quick fixes: arms, wrists and hands

Adjust keyboard height
- – Place it on a drawer or your lap
- – Raise your chair temporarily

Adjust keyboard angle
- – Raise keyboard legs or prop

Watch for and correct repetitious reaching

Center your work

Mouse position
- – Adjust it closer or farther
- – Check mouse operation

Chair arms
- – Up or down
- – Wrap with towel

Avoid pounding keys

What's wrong with this picture?

What's wrong with this picture?

1. Chair is too low
2. Monitor is a bit too high
3. Reaching for his keyboard and mouse
4. Elbows are not at 90 degrees
5. Feet are not flat on the floor
6. Phone needs a cradle or a headset

What's correct with this picture?

- ✓ No glare on computer screen
- ✓ Wears corrective lenses
- ✓ Documents are at monitor height
- ✓ Monitor is the correct distance away from eyes (between 18 to 28 inches)

Ergonomics 101

Thank you for your attention and participation!