Old workstation in need of complete make over

- Thick desk
- Chair with no adjustments
- Keyboard and mouse probably too high
Benefits of self assessment

- Employees can quickly make adjustments to improve their workstation
- Allows DEHS ergonomists to focus on significant areas of concern
- The illustrations and photos cover most of the common ergonomic problems and solutions
- DEHS will continue to do personal evaluations for U of MN employees if they are unable to make the modifications
Use the following diagrams and photos to adjust your workstation

- Common chair adjustments
- Keyboard height
- Use of footrest
- Monitor placement
- Mouse placement
- Center keyboard and monitor
- Document placement
- Problems that need immediate attention
Adjust your chair back height

- The back rest is often too low
- Loosen the knob highlighted in black
- Adjust back height to maximize lumbar support
- Tighten knob
- Consult manufacturers directions for other chairs
Adjust your chair back height (cont.)

- This will need to be rechecked two to four times per year because the knob tends to loosen.

Good back rest lumbar support
Adjust your chair seat depth

- This chair seat is too shallow
- Adjust seat pan to the proper depth
- This option is available on most chairs
- Less than six inches of leg should be unsupported in front of the chair

Chair seat supports less than 2/3 of leg
Adjust your chair seat depth (cont.)

- This chair seat is too deep
- The seat may be adjusted by pulling out a knob on the side opposite the up and down lever
Adjust your chair seat depth (cont.)

- This chair seat depth is just right
- Consult with the chair manufacturer on the mechanism to adjust chair depth
- Some chairs do not have this option

Gap from edge of chair to calf should be 1 to 3 inches
Adjust the arm support

- When arm rests are set too high shoulder pain may be experienced
- Arm rests should be height-adjustable
Adjust the arm support (cont.)

- Resting elbow height should allow the shoulders to be relaxed
DEHS does not recommend use of exercise ball for a primary chair.

- The chair is not height adjustable
- Upper back support is non-existent
- No arm support
Fix a workstation that is too high

- This chair and desk are too high
- Elbow height is below the keyboard height
- The desk is too high
Install a keyboard tray

- Solution 1: install a height-adjustable **keyboard tray**
- A keyboard tray reduces stress on the legs allowing the feet to touch the floor
- The keyboard tray facilitates proper arm posture

Keyboard tray used for low chair
Use a footrest

- The footrest reduces stress on the leg with the thigh parallel to the floor.
- The footrest also promotes good back posture.

Footrest puts knee and hip at same height.
Adjust monitor placement

- For people without bifocals, the monitor distance should be approximately one arm’s length.

Monitor too far away
Adjust monitor placement (cont.)

- This arm’s length distance allows people to view the monitor without bending forward or straining their eyes.
- Set monitor at eye level.
Monitor placement – Bifocals only

- The monitor should be lower and closer for people using the bifocal lens.

- Single lens computer glasses may also be used. Computer glasses are used for distances of 20 to 30 inches.

- Reading glasses are used for distances less than 20 inches.
Adjust the placement of the mouse

- The mouse should be close to the keyboard slightly above the surface of the keyboard platform.

Poor mouse position on desk above and away from keyboard.
Adjust the placement of the mouse (cont.)

- Locating the mouse on the desk can result in shoulder discomfort caused by reaching for the mouse.
Adjust the placement of the mouse (cont.)

- The mouse should never be lower than the keyboard. This can result in wrist and shoulder discomfort caused by reaching and bending the wrist.
Adjust the placement of the mouse (cont.)

- The mouse should be close to the keyboard at or slightly above the surface of the keyboard platform.

Standard mouse set up at same height as keyboard.
Adjust the placement of the mouse (cont.)

- Some stress may be noticed because the 10 keypad on the right may cause the right arm to be in an awkward position.
Adjust the placement of the mouse (cont.)

- Some individuals use the mouse on the left to work more efficiently with spreadsheets.
Adjust the placement of the mouse (cont.)

- Locating the mouse on the left reduces stress on right hand and shoulder because the 10 key is not in the way.

- For tall people or people using a footrest, the mouse can be placed on the desk top.
Adjust the placement of the mouse by changing the keyboard

- A keyboard with the 10 key pad on the left side reduces the stress of using the mouse on the right side.
Adjust the placement of the mouse

- The roller mouse is useful in tight spaces

- With heavy use, stress may be noticed on the index finger or thumb

A roller mouse can be used when there is no room for a mouse on the side
Align the keyboard with the monitor

- Do not center the monitor with the middle of the keyboard platform

Align the monitor with the "G" and "H" keys on the keyboard
Align the keyboard with the monitor (cont.)

- Do not center the monitor with the middle of the clipped edge keyboard platform.
Set-up a document holder

- Documents placed on the desk often result in poor neck posture

- This set-up works for a single sheet
Set up a document holder (cont.)

- Several sheets can be held using this document holder.

Free standing document holder to the side and same height as the monitor.
Set up a document holder (cont.)

- This is the most popular document holder.
- It can hold two 8 x 11 inch sheets side by side.
- This set up may not work for people with bifocals or progressive lenses.

Free-standing document holder below the monitor.
A wireless headset maybe worthwhile if:

- Phone use is greater than 2 hours per day
- The computer and the phone need to be used at the same time
- Using a speaker phone is not an option
Replace the desk if it is too thick

- The desk edge is too thick making it impossible to type at the right height or have proper leg clearance.
Replace a broken chair

- A chair with a four leg wheel base is a tipping hazard. Purchase a chair with a five leg base
- Replace a chair if the pneumatic cylinder is stuck or it will not hold its height
- Check warranty information on chairs less than 10 years old
Sit Stand Workstation

- A Sit Stand Workstation offers a change in position
- Work up to a maximum of 4 hours per day standing
- Sit down when discomfort is noted
- Best to not sit for more than 45 minutes at a time
A properly designed workstation

Additional resources are listed on the following page.
More Information on U of M Office Ergonomics

Ergonomics Programs:  https://dehs.umn.edu/ergonomics-programs

Ergonomic training:  https://dehs.umn.edu/ergonomic-training

Ergonomic evaluations:  https://dehs.umn.edu/ergonomics-evaluations

Ergonomic solution center:  https://dehs.umn.edu/ergonomics-solution-center

Office Ergonomics main page:  https://dehs.umn.edu/office-ergonomics
Contact information:

Congratulations if you were able to successfully adjust your workstation!

If you still need an ergonomic evaluation contact DEHS by calling (612) 626-6002 or sending email to dehs@umn.edu

Please schedule four weeks in advance.