OFFICE ERGONOMICS WEBINAR
August 2009

CAUSE AND EFFECT OF MSDs

Shari LaRue, PT, MIS

FEATURE	CAUSE	EFFECT
Chair Height	Too High	Cuts off or reduces circulation to the legs Causes LBP Causes wrist flexion during use of the keyboard
	Too Low	Knees positioned higher than hips flattens the low back (decreased lordosis) causing LBP Increased pressure on iscial tuberosity Increased elevation of shoulders to use keyboard Wrist extension increased when using keyboard
Chair Backrest	Too High	Pushes thoracic – cervical spine forward Decreases lumbar lordosis
	Too Low	Puts pressure on sacrum Inadequate support in lumbar spine reduces lordosis
Chair Seat Pan	Too Long	Pressure on popliteal fossa, decreasing circulation to Les Sitting forward on chair causing loss of LB support
	Too Narrow	Contact stress secondary to arm support placing pressure on lateral thighs Curvature of the chair pain causes increase hip pressure
Chair Armrests	Too High	Increased tension in upper back, shoulders and neck
	Too Low	Encourages leaning postures or slouching Decreases lumbar lordosis
Desk or Keyboard	Too High	Increased tension in upper back, shoulders and neck Unsupported feet causes pressure on thighs and LBP Direct pressure on forearms or wrist from desk top or keyboard tray – wrist pain results
	Too Low	Direct pressure on thighs from desk (clearance issues) Causes chair height to be too low (see above)
Mouse Location	Reaching	Increased upper back, shoulder or neck pain Direct pressure on forearm or wrist
Monitor Location	Too High	Increased neck extension, neck and/or upper back pain Increase stress on eyes, eye strain and/or headaches
Documents	On desk top	Repeated motions looking down and up to monitor causes increased neck, upper back and eye strain
Phone	Placement	Reaching results in increase strain to upper back, shoulders Cradling phone results in neck, upper back and/or shoulder tension. May cause headaches
Desk Top Arrangement	Placement	Reaching for heavy manuals, folders, other desktop objects increased strain / stress to upper back, neck and shoulders.

Employee Name:_____

Date: _____

Keep this as your own personal reference.

KEY TO MEASUREMENTS:

CHAIR HEIGHT: _____
From floor to top of the seat pan

ARM REST HEIGHT: _____
From floor to top of arm rest

DESK HEIGHT: _____
From floor to top of desk work surface

KEYBOARD HEIGHT:_____
From floor to the base of the keyboard

MONITOR HEIGHT: _____
From desk work top to top 1" of the monitor

WORK RECOMMENDATIONS:

- **Take a break from your computer every 20-30 minutes. Stand up and stretch.**
- **Maintain neutral postures**
  - You should sit directly in front of your work or computer, not at angles.
  - Sit upright with your back and shoulders against the backrest
  - Allow your shoulders to be relaxed and elbows at your side
  - Keep your wrists straight (not bent up or down) and forearms parallel to the ground
  - Your hips should be slightly higher than your knees
  - There should be 2-4 inches between your knees and the edge of the chair
  - Feet should be flat on the floor or supported by a footrest
- **Arrange your work area for comfort and accessibility**
  - Keep frequently used items close to avoid reaching
  - Remove clutter – provide space to work without reaching or working at angles
  - Have adequate space under your desk so you can get close to your work
  - Document holders help reduce neck and eye strain
  - Use wrist rests and arm supports

Signature: _____ **Date:** _____

CC Employer for employee files: _____ _____
Name **Date**

ERGONOMIC ANALYSIS

Employee Name: _____ Date: _____

Company Name: _____ Phone #: _____

Requested by: _____ Performed by: _____

Workstations Measurements	Recommended	Notes
Desk Height (floor to top of desk work surface)		
Chair Height (floor to top of seat pan)		
Arm Rest Height (floor to top of arm rest)		
Keyboard Height (floor to base of keyboard)		
Monitor Height (desk work surface to top 1" of monitor – desk MUST be adjusted first)		

JOB TASK DESCRIPTION

Job Tasks	% of day	Recommendations
Computer work		
Data entry		
Calculator use		
Typing from copy		
Phone use		
Other:		

Reported symptoms or concerns:

EQUIPMENT: 0 = NA X = Currently Has √ = Needs

Keyboard Tray w Room for Mouse		Mouse Wrist Rest		Foot Rest	
Wrist Rest		Document Holder		Phone Headset	

OFFICE ERGONOMICS REFERENCES

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