



Risk Management & Safety

Ergonomic Checklist

Below is one that has been successful in helping people "sharpen their eyes" in looking for risk factors. Possible solutions to each problem are also listed.

And (surprise!) there are almost always SEVERAL ways to fix a given problem. But remember our motto: "For everything you fix, you probably screw up something else."

Things to look for	Possible solutions, (depending on further analysis)
Prolonged hunched or elevated shoulder while holding the phone	Telephone headset Speakerphone
Elbows splayed out (shoulder abduction)	Lower work surface Lower chair armrests Bring chair armrests in closer Awareness and habit training
Raised or tensed shoulders	Habit or tension training Lower work surface or keyboard Lower chair armrests Raise chair, if foot contact with the floor can be maintained
Twisting the head to the side	Bring viewed item closer to centerline of view
Elbow flexed for long periods using the telephone	Telephone headset Speakerphone
Elbow or forearm resting for long periods on hard or sharp work surface, chair armrests	Pad or round surfaces, corners, and armrests Replace armrests Telephone headset Habit training
Wrists bent to the sides when using side keys	Habit training Keyboard with more accessible keys or split keyboard design
Wrists bent back (extended) or forward (flexed) for prolonged periods	Habit training Palm rest Lower, raise, or change slope of the keyboard

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Wrists or palms resting for long periods on hard or sharp keyboard or work surfaces	Habit training Palm rest Padded or rounded surfaces, corners
Hands held actively over the keyboard during keying pauses	Habit training Palm or forearm rest
Rapid, sustained, or prolonged keying	Greater work variety Aggressive break schedule Reduce overtime
Forceful keying, key pounding	Habit training Light-touch keyboard
Significant amounts of hand stapling, punching, lifting, opening mail, or other forceful exertions, especially combined with awkward postures	Mechanical aids, such as electric stapler or punch Reduce size of lifted loads Bring heavy loads close to the body, at a medium height Substitute sliding (work surface) or wheeling (floor) Sharpen letter openers
Prolonged mouse use	Greater work variety Aggressive break schedule Alternate hands Alternative pointing devices Arm support, including small table Mouse close to body (extended keyboard tray) Learn keystroke substitutes for menus
Prolonged sitting, especially in only one posture	Greater work variety Aggressive break schedule Chair that supports posture change, through movement, size, or easy adjustability Habit training Move phone and printer to the other side of the office to force standing, or suggest standing when on phone Check chair fit Monitor in-out mechanism Sit-stand work surface

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Lumbar back area not supported	Lumbar cushion Backrest height and tilt Check chair fit, especially backrest/lumbar height
Feet dangling, not well supported, or a posture which seems to put pressure on the backs of the thighs	Lower chair Lower work surface Habit training Foot rest (last resort)
Chair backrest not used for long periods	Check chair fit, especially seat pan depth and height Check leg room Check monitor distance and character height Habit training
Twisted torso	Rearrange work Provide more knee space U-shaped work surface layout Swivel chair
Frequent or prolonged leaning or reaching	Rearrange work Mouse pad, palm or forearm rest Bring mouse and keyboard closer to body
Working with one or both arms "reaching" toward a mouse or keyboard	Bring keyboard closer to body Mouse pad, palm or forearm rest Bring mouse closer to keyboard
Light sources that can be seen by the worker	Cover or shield light sources Rearrange work arena Lower other viewed objects to lower field of view

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Reflected glare on the screen	Shield light sources Shade screen Glare screen Move monitor so light enter from side angle, not back Do NOT tip monitor down Lower light levels Move light sources
Too much contrast between screen and surroundings or document; worker feels relief when bright areas are shielded	Lower ambient light levels Turn off, reposition, or dim task lights Block offending light sources Change screen polarity to black on white
Very bright ambient lighting (above 500 lux or 50 fc) or shadowed areas caused by over-illumination	Lower ambient light levels to 200-500 lux (20-50 fc) and use task lights
Monitor closer than approximately 65 cm (25")	Push monitor back (enlarge font size) Habit training for reclining Computer glasses Bring keyboard forward, possibly with a keyboard tray
Different viewed objects (screen, documents) at different distances from the eyes	Use document stand or otherwise equalize distances to within about 10 cm (4") if rapid viewing changes are required
Screen or documents not oriented perpendicular to the line of sight (tipped back slightly is even better)	Change monitor, document stand angle
Prolonged near focusing throughout the day with few far-focusing opportunities	Move monitor back as far as possible Habit training Rearrange space to provide view Introduce glazing

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Things to look for	Possible solutions, (depending on further analysis)
Monitor image dim, fuzzy, flickers, small, or otherwise difficult to read	Upgrade monitor Use software to enlarge image
Shiny, low-contrast, or small-print documents	Improve lighting on documents if documents cannot be changed
Forward head posture (peering) or squinting	Lower monitor Tilt monitor back Check for monitor image quality problems, character height or monitor distance Suggest consultation with vision specialist
Eyestrain complaints	Check all aspects of visual environment Suggest consultation with vision specialist
Neck extended backwards, head tilted back, even slightly	Remove CPU from under monitor Remove tilt-swivel base from monitor (leave ventilation space) Check for bifocals and suggest full-frame "computer glasses" prescription
Neck severely flexed (downward)	Tilt face of monitor back Tilt document - do not lay flat on work surface Raise document or monitor to a comfortable height Adjust posture Habit retraining Check glasses for proper prescription