

Ergonomic Risk Assessment – Computer Workstations

Use this template to assess the risk of musculoskeletal injuries to clinic staff associated with computer work.

General Information

Clinic name:

Workstation location:

Workers consulted:

This ergonomic risk assessment evaluates musculoskeletal injury (MSI) risk for clinic staff using computer workstations. MSI risk factors fall into two main categories: (1) **physical demands**, the most common MSI risk factors and (2) **contributing factors** or working conditions. To assess MSI risk factors, review the workstation and work characteristics, observe staff performing their task, and ask about their experience.

When determining whether the risk is low, moderate, or high, consider the following:

1. The frequency, duration, and intensity of exposure to physical demand risk factors.
2. The impact of each contributing factor.
3. The combined effect of all known risk factors.

1. MSI Common Risk Factors - Physical Demands

- **Force:** This is the effort a worker must exert to do a task. Gripping and pinching are examples of forceful exertions. The risk of MSI increases with the intensity of the force.
- **Repetition:** This involves performing a task using the same muscles repeatedly, with little opportunity for rest or recovery. This applies to both large and small muscle groups.
- **Work posture:** Both awkward and static postures are included. Awkward postures happen when joints bend or twist beyond a comfortable range, stressing tendons, muscles, and soft tissues. Static postures occur when a position is held for a prolonged period, long enough to cause discomfort or pain.
- **Contact stress:** This occurs when a hard or sharp object presses against the skin or underlying tissues.
- **Duration:** A key factor for all the physical demand risks noted above. The overall duration of computer work is an important factor for assessing exposure to physical demands and predicting MSI risk.

The table below evaluates the physical demand factors of tasks at a computer workstation. For computer work, some of these risk factors pose a higher risk for MSI than others, so the table uses a weighted scoring system. Each risk factor includes examples related to computer work. Choose the highest frequency and/or intensity that applies to any of the examples below, then add up your results.

Frequency/Intensity Rating Legend:

- Not present: Not observed.
- Occasional: Up to 25% of shift (<2 hours in an 8-hour shift).
- Frequent: 25-75% of shift (2-6 hours in an 8-hour shift).
- Constant: More than 75% of shift (>6 hours in an 8-hour shift).

Risk Assessment - Physical Demands	Frequency/Intensity
Force	
- Gripping the mouse tightly. - Gripping phone handset or mobile device. - Pinching small office items like pens, staples or paper clips.	Not present – 0 point Occasional/light – 1 point Frequent/moderate– 2 points Constant/severe – 3 points
Repetition	
- Typing, and/or - Clicking, and/or - Scrolling, and/or - Phone use.	Not present – 0 point Occasional/light – 2 points Frequent/moderate– 4 points Constant/severe – 6 points
Work Posture	
<u>Awkward Postures</u> - Wrists bent while typing or using the mouse, and/or - Neck leaning forward or twisted, and/or - Shoulders raised or reaching forward.	Not present – 0 point Occasional/light – 3 points Frequent/moderate – 9 points Constant/severe – 12 points
<u>Static Postures</u> Sitting or holding the same position without movement for extended periods.	Not present – 0 point Occasional/light – 3 points Frequent/moderate – 9 points Constant/severe – 12 points
Contact Stress	
Wrists, forearms, or elbows resting on hard or sharp desk edges.	Not present – 0 point Occasional/light – 1 point Frequent/moderate– 2 points Constant/severe – 3 points
Duration	
Computer work duration per day.	Not present – 0 point Occasional – 3 points Frequent – 9 points Constant – 12 points
Total Score	out of 48 points
MSI Risk - Physical Demands	Low (< 14 points)
	Medium (14-32 points)
	High (> 32 points)

2. MSI Contributing Risk Factors - Working Conditions

Contributing risk factors for MSI related to computer work include:

- **Workstation Setup:** The workstation should be properly set up to fit the user(s) and minimize strain. This includes the chair, desk, monitor, keyboard, mouse, and other accessories.
- **Environmental Conditions:** Poorly controlled temperature and lighting can contribute to awkward postures and muscle strain (e.g., cold increases muscle stiffness and strain risk; poor lighting or glare causes eye strain and awkward postures).
- **Work Organization:** Variation in tasks, pace, and breaks reduces repetition and allows muscles and tissues to rest and recover.

The table below evaluates the contributing risk factors for MSI at the computer workstation being assessed. Indicate whether each item applies to determine the level of MSI risk posed.

Risk Assessment – Contributing Factors			
Workstation Setup - Chair	Yes	No	N/A
The chair seat height can be set to an appropriate level that allows forearms to remain parallel to the floor, with hands resting on the desk (elbows at desk level).			
With the chair height adjusted as described above, feet are fully supported by the floor or footrest.			
If a footrest is needed, it is large enough to support both feet, has a non-slip surface, provides an adjustable slope, and remains stable during use. (If the workstation is shared, the footrest should also be height-adjustable).			
The chair backrest provides adequate lumbar support to maintain the natural curve of the lower back.			
The chair seat has a rounded front edge, with no pressure behind the knees.			
Chair armrests, if present, allow relaxed shoulders (not elevated) and do not interfere with desk access, typing, or mouse use.			
Chair upholstery is made of breathable fabric with adequate cushioning to support proper posture.			
Workstation Setup - Monitor	Yes	No	N/A
The top of the monitor screen is at or slightly below eye level. For bifocal or progressive lens users, the monitor may need to be set lower. The goal is to always keep a neutral neck posture.			
The screen is about an arm's length away, allowing full screen visibility without eye strain and maintaining a neutral neck posture.			
The monitor is directly in front when working, without neck rotation. (If two monitors are equally used, their edges meet directly in front, allowing eye movement rather than head or body rotation).			
The monitor allows adjustment of the screen brightness and contrast.			

Workstation Setup - Desk and Reach Distances		Yes	No	N/A
The work surface, mouse, and keyboard are all at elbow height.				
Frequently used items (e.g., keyboard, mouse) are placed within easy reach without stretching (< 30 cm or 12 inches).				
Occasionally used items (e.g., phone) are placed within stretched arm reach (30-50 cm or 12-20 inches).				
There is enough space under the desk to move legs freely, and it is not cluttered with stored materials.				
Workstation Setup - Accessories		Yes	No	N/A
The keyboard is flat, allowing neutral wrist posture (wrists aren't bent up, down, or sideways).				
The mouse is beside the keyboard and at the same level, minimizing reach.				
Wrists are straight and upper arms are relaxed while using the mouse or keyboard.				
Comfortable and upright head posture is maintained while using the phone.				
A headset is used when typing or writing during phone calls.				
If a laptop is used for prolonged periods, a laptop stand, an external keyboard, and a mouse are used.				
If frequent reading of paper documents is required, a document holder is placed close to the monitor, either beside it or between the keyboard and the screen.				
Environmental Conditions		Yes	No	N/A
Office temperature is comfortable (20–24°C or 68–75°F).				
The lighting level makes it easy to see the screen without squinting or straining.				
There is no glare or reflection on the monitor screen or work surface.				
Lighting is sufficient for reading or writing paper documents.				
Work Organization		Yes	No	N/A
There are regular non-computer activities throughout the day that allow changes in posture and engage different muscle groups.				
Micro-pauses are taken every 30–60 minutes during extended computer tasks for postural breaks or stretching.				
Total "No" Score		out of 28 items		
MSI Risk – Contributing Factors		Low (<6 "No" responses)		
		Medium (6-18 "No" responses)		
		High (> 18 "No" responses)		

3. Overall MSI Risk Level (All Factors Combined)

The table below defines the overall MSI risk for the computer-based task being assessed, considering both categories of risk factors: physical demands and contributing factors. Enter the MSI risk identified in the tables above for each category to confirm the overall risk level.

MSI Risk - Physical Demands	Low	Medium	High
MSI Risk – Contributing Factors	Low	Medium	High
Overall MSI Risk Level	Low (= low + low)		
	Medium (= any medium)		
	High (= any high)		

4. Corrective Actions

Corrective Actions	Low Minor adjustments/ No urgency	Medium Correction needed/ Timely manner	High Major corrections/ Without delay
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After determining the overall MSI risk level, use the table below to record the recommended interventions needed to reduce the risk of musculoskeletal injury. Include specific adjustments, equipment changes, work practice modifications, or training. Use [Appendix A](#) to help complete the table below.

Recommended Control	Assigned to	Target Date	Comments

Assessment Completion

Conducted by: (name, position)		Date completed:	
Employer review: (signature)		Date reviewed:	

Appendix A: Examples of Corrective Actions

Select the actions needed for your clinic and use the reference numbers to complete the table in the corrective action section. Note that this list is not comprehensive, and additional corrective actions may be needed.

Recommended Control	
Workplace Setup	
	1. Train staff on proper workstation setup.
	2. Lower/raise the chair seat height (elbows at desk level).
	3. Lower/raise workstation surface (elbows at desk level).
	4. Obtain a footrest to provide foot support.
	5. Position the monitor directly in front of the user.
	6. Adjust monitor distance (arm's length away).
	7. Lower/raise monitor (top of screen at or slightly below eye level).
	8. Flatten the keyboard for neutral wrist posture.
	9. Move the mouse closer to the keyboard.
	10. Add padded palm support to reduce pressure points (if wrists drop while typing or using mouse).
	11. Adjust armrests/remove armrests to maintain relaxed shoulders.
	12. Rearrange the workstation (comfortable reach).
	13. Ensure adequate leg clearance under the desk.
	14. Add a back support to the chair.
	15. Obtain a chair with a backrest for lower back support.
	16. Obtain a swivel chair to improve mobility and reduce twisting.
	17. Obtain a fully adjustable ergonomic chair.
	18. Obtain sit-stand desks to alternate between sitting and standing.
	19. Obtain a headset for frequent phone use to avoid awkward neck posture.
	20. Obtain appropriate laptop accessories (stand, external keyboard, and mouse).
	21. Obtain a document holder to minimize neck movement.
Environmental Conditions	
	22. Adjust the temperature control system to maintain a comfortable indoor environment (20–24°C).
	23. Obtain a fan/heater.
	24. Adjust overhead lighting/add a desk lamp.
	25. Reduce glare (reposition monitor, use blinds or anti-glare filters).
	26. Adjust screen brightness and contrast for comfort.
Work Organization	
	27. Train staff to rotate tasks / alternate computer work with non-computer tasks.
	28. Train staff to take micro-pauses / postural or stretching breaks.