How to Protect Remote Workers from Home Office Workstation Ergonomics Hazards



Telecommuting didn’t begin with the pandemic, and it didn’t end with it, either. Studies show that roughly 1 in 5 Canadians who are employed work at least one day a week from home. It’s incumbent on companies to adjust their OHS programs to deal with these remote work arrangements. **Explanation:** In most parts of Canada, the OHS duty of employers to maintain a safe and healthy workplace extends not just to the company’s site or facility but to external locations where workers carry out their duties, including their homes. And in a home office setting, one of the most significant work hazards is risk of musculoskeletal injuries (“MSIs,” sometimes referred to as “musculoskeletal disorders” or MSDs), painful injuries to the muscles, nerves, bones, and joints that typically develop gradually as a result of sitting at a computer workstation all day over an extended period of time.

Bottom Line: OHS laws require employers to implement what are known as “ergonomic” and other measures to protect workers from MSI risks. As OHS coordinator, it’s incumbent on you to ensure that the ergonomics program covers not just the workers who work at the site but also those who do their job from home. Here’s a 7-step Game Plan to help you ensure the ergonomic safety of remote workers.

The Employer's OHS Law Duty to Protect Remote Workers

OHS laws require employers to take measures to protect the health and safety of their "workers/employees" in the "workplace/place of employment." The general definition of "employee/worker" as a person who does work for an employer is broad enough to cover most telecommuters. The question then becomes whether the home office or other remote location in which they do their job counts as a "workplace." And, in most jurisdictions, that answer is yes:

- **Definite Yes:** In Ontario and Québec, the OHS Act expressly states that the law does apply to telework absent a specific exception stating otherwise.
- **Likely Yes:** In 9 jurisdictions, (BC, Federal, Manitoba, Newfoundland, Northwest Territories, Nova Scotia, Nunavut, Prince Edward Island, Saskatchewan), the OHS laws don't specifically address telework but define workplace/place of employment very broadly as a location in which a worker/employee performs, carries out, engages, or is engaged in work. That language could easily be interpreted as including a worker's home or other remote location. Federal law also specifies that employer OHS duties applies even to workplaces the employer doesn't control to the extent that it controls the activity, which would likely include a home office (*Canada Labour Code*, Sec. 125(1)).

In Alberta, New Brunswick, and Yukon, OHS Act requirements don't apply to work carried out at a private residence by the occupant or owner of the property. While that could be read as including telework carried out at a worker's home, the exception includes language carving out work performed for an employer who's not the owner or occupant of the property. In other words, the private residence exception **wouldn't** apply to conventional telecommuting arrangements where a company

employee works from home.

5-Step Home Office Workstation Ergonomics Compliance Game Plan

Implementing an ergonomics program to protect remote workers against MSI hazards is highly advisable, even if it's not an OHS requirement in your province—especially since MSIs are the fastest growing source of workers' comp claims across Canada. Here are the 7 things to do.

Step 1: Do a Home Office Ergonomic Hazard Assessment

Start with a hazard assessment by doing a walk-through of the telecommuter's home office or other work area and identifying health and safety hazards as comprehensively as you do at your own facilities. While an in-person assessment is preferable, you can also do it virtually. In either case, be on the lookout for risks of both traumatic and cumulative MSI risks:

- **Traumatic MSI:** Jane hurts her wrist when trying to lift a heavy object.
- **Cumulative MSI:** Jane hurts her wrist as a result of bending it on her keyboard for 6 hours per day over a 3-year period.

Implementation Strategy: Methods of office workstation MSI hazard identification and assessment include examination of the physical space, including the home office where possible, analyzing ergonomic injury report records, surveying workers and directly observing workers as they actually perform their duties. Consider 14 risk factors:

1. **Posture:** The remote worker's body should be in a neutral position with the:

- Hands, wrists, and forearms straight, in-line and roughly parallel to the floor.
- Head level.
- Upper arms hanging normally at the side of the body.
- Elbows close to the body and bent between 90° and 120°.
- Feet fully supported by the floor or a footrest if the desk height isn’t adjustable.
- Back fully supported when the worker sits vertically or leans back slightly.
- Thighs and hips supported by a padded seat that’s parallel to the floor.
- Knees about the same height as the hips.
- Feet slightly forward.

2. Remote worker’s distance from computer monitor: The preferred viewing distance from the eyes to the front surface of the computer is between 20 and 40 inches/50.8 to 101.6 cm.
3. Angle of computer monitor: Monitors should be tilted no more than 35° to either side.\
4. Height of computer monitor: The top of the computer monitor should be at or slightly below eye level so that the center of the monitor is 15° to 20° below horizontal eye level.
5. Height of keyboard: The keyboard should be at a height that enables the worker to maintain a neutral body posture.
6. Remote worker’s distance from keyboard: The keyboard should be at a distance that enables the worker to keep the elbows close to the body and forearms roughly parallel with the floor.

7. Position of remote worker’s wrists when using keyboard: Wrists should be in a neutral position and not bent.
8. Position of the mouse: The mouse should be at a distance and in a position that enables the worker to use it without bending the wrists.
9. Amount of work surface on desk: The desk work surface should be deep enough to allow the worker to view the monitor at a distance of at least 20 inches/50.8 cm and position the monitor directly in front of him.
10. Amount of space under desk: There should be enough clearance under the desk to allow the worker to keep the appropriate distances between herself and the computer and change postures.
11. Height of desk: The desk should be at a height that allows the worker to maintain a neutral position while sitting at it.
12. The remote worker’s chair: The chair should:

    - Provide adequate back support.
    - Be adjustable or set at a height that enables the worker to maintain a neutral posture.
    - Have padded armrests that are adjustable or set at a position that supports the lower arm and enables the worker to keep the upper arm near the torso.
    - Be free of sharp corners that can cause contact stress to the forearm.

13. Lighting: The workstation should be lit bright enough to enable the worker to see without squinting or straining the eyes but not so brightly as to cause glare, shadows, or contrast problems.
14. Repetition: Steps should be taken to minimize repetitive tasks requiring workers to use the same muscles over and over without ample recovery time.

Step 2: Implement Controls to Eliminate MSI Hazards

Follow the “hierarchy of controls” in deciding how best to protect remote workers from the MSI hazards you identify.

First Choice: Elimination

If reasonably practicable, completely eliminate the hazard, such as by not having workers carry out workstation operations that expose them to MSI hazards.

Second Choice: Engineering Controls

If, as is likely to be the case, elimination isn’t reasonably practicable, use a combination of engineering and work/administrative controls and PPE to minimize MSI hazards. **Implementation Strategy:** Engineering controls for MSIs consist principally of ergonomic measures designed to change the physical work environment and way work is carried out so that job tasks are fitted to the person, rather than the other way around, such as by putting objects on shelves at waist height so that workers can work on the objects without having to bend down or reach up. Measures to consider include:

Workstation Design: Designing the physical workstation so that the workspace is both comfortable and ergonomically sound.

Workstation Furnishings and Equipment: This typically includes:

- Chairs that:
    - Are adjustable in height and incline.
    - Provide lumbar support.
    - Have padded, appropriately sized arm rests.
    - Have 5-legged bases.
    - Can be further adjusted with seat pads and footrests.

        - Desktop items designed to reduce MSI risks, including:
        - Ergonomically designed keyboards, mouses, and mouse pads.
        - Document holders.
        - Wrist and palm supports.
        - Hands-free headsets for phones and computers.

    - Desks that:

        - Are adjustable in height.
        - Provide adequate work surface allowing workers to place computer monitors, keyboards, and other frequently used equipment in places where workers can use them while maintaining a neutral posture.
        - Provide adequate clearance space so workers can maintain optimal workstation postures and shift postures.
        - Are free of sharp edges and other potential sources of contact stress.
        - Lighting designed to make computer work easy to see while minimizing reflection and glare.

Third Choice: Work/Administrative Controls

Use work or administrative controls that minimize MSI hazards by affecting how workstation work is carried out if engineering controls aren't reasonably practicable or as a supplement to such controls. **Implementation Strategy:** Design the work so that workers can carry it out:

- While maintaining a safe posture.
- With minimum repetition.
- With minimum contact stress.
- Without having to reach above, below, or across the body.

Example of a workstation MSI work control: Frequent breaks for workers who perform repetitive tasks to maximize recovery and

minimize repetitive stress.

Fourth Choice: PPE & Protective Equipment

The last line of defence is to ensure that remote workers exposed to workstation MSI hazards have and use appropriate protective equipment, which may include wrist and palm supports, footrests, and ergonomically designed office furnishings referred to above.

Step 3: Provide Appropriate Ergonomics Training

Educate and train remote workers on MSI hazards and how to protect against them. **Implementation Strategy:** At a minimum, ergonomic safety training for home office workstation work should cover:

- What MSIs are.
- The causes of MSIs and how workers can get them from workstation work.
- How to set up their workstations safely.
- The safe postures workers should maintain to avoid MSIs.
- How to use the ergonomic equipment and furnishings provided to maintain safe posture.
- Other measures in place to protect workers from MSIs.
- The symptoms and signs of an MSI and what workers should do if they experience them.
- The procedures for reporting injuries and hazards.

Verify that remote workers actually understand and are capable of applying their training on the job by:

- Quizzing workers on the lesson after you deliver it.
- Making workers demonstrate the safe workstation postures and methods covered during the training.
- Observing workers perform workstation operations to

ensure they’re actually following their training.

Step 4: Regularly Inspect the Remote Worker’s Home Office Workstation

Just as you do with your on-site safety measures, you must monitor the ergonomic controls you implement to protect remote workers against MSI risk. So, require telecommuters to provide you access to their home workspace for inspections covering not just ergonomics but all of the safety measures taken to ensure their work safety. Specify how often you’ll carry out regular site inspections and get the right to perform unscheduled inspections as necessary in response to:

- Signs and symptoms of MSIs reported or exhibited by the remote worker.
- Actual injuries or incidents involving home office workstation operations.
- Significant changes to workstation operations that weren’t accounted for or anticipated in the current hazard assessment.

Specify who will perform site home office inspections, such as a supervisor or JHSC member, and how much advance notice you’ll provide before inspection. As with the initial hazard assessment, you may also perform site inspections virtually if in-person access isn’t workable.

Regardless of how you do the inspection, require the employee to take corrective actions and do follow-up inspections to verify that problems identified during the inspection have been fixed. To establish accountability, the company should reserve the right to terminate the telecommuting agreement immediately if the remote worker fails, obstructs, or refuses to allow site inspections or doesn’t take appropriate corrective actions.

Step 5. Require Remote Workers to Report MSIs & Other Injuries

Require remote workers to immediately notify their supervisors of any injuries or safety incidents that occur in their workspace, just the way they'd have to do for work incidents at the company's own facilities. Keep in mind that the OHS duty to protect remote workers includes responsibility for ensuring that they receive the necessary first aid and rescue help if they get injured on the job.

Step 6. Investigate Remote Workers' Injuries

The OHS law duty of employers to investigate and report work injuries and incidents applies to remote workers and workspaces. So, ensure that the remote worker provides you the necessary access to perform those investigations. Telecommuter safety training should address incident response and the need of remote workers to preserve the incident scene unless cleaning up, moving equipment, or other measures are essential for immediate safety.

Step 7: Document Your Ergonomic Control Measures

Last but not least, keep careful records documenting the program you implement to safeguard remote workers against MSI hazards so you can review the effectiveness of your efforts and demonstrate compliance with OHS requirements.