



WORK-FROM-HOME ERGONOMIC CONSIDERATIONS FOR EMPLOYERS

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W H I T E P A P E R

ERGONOMIC ISSUES WITH WORK FROM HOME

The COVID-19 pandemic has fundamentally transformed the work lives of many people from office-based locations to work-from-home (WFH) scenarios. According to Upwork, as of December 2020, 41.8% of the American workforce was working remotely.¹ A recent Gallup Poll shows that number hasn't changed much, with 45% of full-time workers working remotely in some capacity during the month of September 2021. It seems that remote work, whether it's full-time or hybrid, is here for a while: "61% of remote workers say they anticipate working hybrid for the next year and beyond; 27% expect to be fully remote."²

Working from home has led to many employees to adopt unconventional spaces such as kitchen tables or sofas for their workstations. But not all environments are ergonomically designed to support remote office work, and poor ergonomics can lead to the development of work-related musculoskeletal disorders (WRMSDs). The Centers for Disease Control and Prevention (CDC) tells us that "Musculoskeletal disorders (MSDs) are injuries or disorders of the muscles, nerves, tendons, joints, cartilage, and spinal discs. Work-related musculoskeletal disorders (WRMSD) are conditions in which: 1) The work environment and performance of work contribute significantly to the condition; and/or 2) The condition is made worse or persists longer due to work conditions."³

Examples of MSDs include:

- Ligament sprains, and muscular strains
- Back pain
- Carpal tunnel syndrome

The CDC also tells us: "WRMSDs are associated with high costs to employers such as absenteeism, lost productivity, and increased healthcare, disability, and worker's compensation claims costs." The 2021 Workplace Safety Index by Liberty Mutual, which highlights the top ten causes of disabling workplace injuries, ranks "awkward postures" (including bending, reaching, twisting, climbing, crawling, kneeling, sitting, standing, walking, and running) as fifth on the list, bearing \$4.71 billion in costs per year and 8% of the injury burden, and "repetitive motion injuries from microtasks" as tenth on the list, costing \$1.66 billion annually and 2.8% of the injury burden.⁴

Employers can improve their employees' safety and health and improve their company's financial performance by addressing the ergonomic risks incumbent with work-from-home scenarios, which can address hazards from both "awkward postures" and "repetitive motions."

EMPLOYER RESOURCES

There are many resources available to employers with guidelines for both prevention and remediation of WRMSDs.

OSHA and NIOSH provide resources to assist safety managers regarding the standards and guidelines related to the prevention of WRMSDs and is beneficial prior to beginning worksite analyses or taking corrective actions.

OSHA provides multiple industry-specific guidelines that address posture, workstations, and work processes.⁵

NIOSH published a useful resource, [A Primer on Workplace Evaluations of Musculoskeletal Disorders](#). This publication addresses the steps necessary to prevent WRMSDs.⁶

WORK-FROM-HOME WORKSTATION ASSESSMENT

Company safety managers, or consultants, can evaluate at-home workstations to assess whether they expose workers to increased WRMSD risks. OSHA provides an ergonomic checklist to perform an assessment and make appropriate workstation modifications. Other sources of helpful information during the assessment phase include incident reports, workers' compensation claims reports and employee complaints.

An observational review in which employees are assessed while working will provide useful information tasks producing pain or discomfort and equipment that is less than optimal. These reviews are often performed by medical and rehab providers (physicians, nurse practitioners, physician assistants, physical therapists, occupational health technicians) and safety professionals including certified professional ergonomists. These reviews may be conducted remotely through videoconferencing.

Once these data have been collected and analyzed corrective actions can be implemented. Many of these may be simple adjustments that improve posture and positioning, alternating standing and sitting and periodic stretching of symptomatic body parts.

Some hazards can only be eliminated through equipment (i.e., desks, chairs, keyboards, mouses, earphones, etc.). Employers should consider developing a list of approved equipment for lending or purchase for those employees that require these modifications.

CONCLUSION

Many companies were not prepared for the WFH requirements created by the COVID-19 pandemic. This left many workers on their own to set up at-home workstations. Recent survey data suggests that the WFH and hybrid models may include a significant number of employees for many years if not permanently. **Employers can improve employee safety and health and protect their financial results by understanding the WRMSD risks the WFH model presents and eliminating these sources of injury. This objective may require revisions to employers' EH&S policies and procedures with regards to the safety of these employees.**

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