



Mount Sinai *Selikoff Centers for Occupational Health*

Ergonomics at Work

Work-related musculoskeletal disorders (MSDs) are a leading type of injury in the workplace and account for 34% of all lost workdays in the United States, according to estimates by the Occupational Safety and Health Administration (OSHA). These conditions are estimated to account for one out of every three dollars spent on Workers' Compensation, costing employers \$20 billion a year on direct costs, and five times that on indirect costs related to staff replacement and retraining.

Financials aside, the impact on workers suffering from MSDs is considerable and can be life changing. MSDs encompass conditions that affect the muscles, nerves, tendons, ligaments, and joints, causing mild discomfort to debilitating pain. Common symptoms are back, arm and shoulder pain, tingling, sensory changes of the arms or legs, or even intermittent throbbing and aches that may dissipate when not at work. Discomfort caused by MSDs can hamper the most basic activities of daily living, such as bathing, shopping, and dressing. Work-related MSDs occur across industries and commonly in jobs that involve sudden exertion or prolonged exposure to physical factors, such as repetitive motion, vibration, lifting, and long hours of working in stationary and awkward postures.

Ergonomic intervention in the workplace can identify risk factors that reduce the risks of developing work-related MSDs and other injuries. Ergonomics is the study of designing work environments, tasks, and equipment to fit the human body. It derives from two Greek words: *ergon* meaning work, and *nomoi* meaning natural laws, denoting quite simply the science of work.

An ergonomically designed product, whether a chair, paintbrush, or even a potato peeler, means that the item has been created with the end user in mind to maximize the user's comfort and enhance job performance. Educating individuals to understand ergonomic risk factors and methods to minimize them is a key component of a workplace ergonomic program. The other essential component of an ergonomics initiative is teaching workers how to optimize their workstation set up, use equipment properly, and the appropriate strategies and exercises that can help improve body posture.

What does an ergonomist do?

Ergonomists at the Selikoff Centers for Occupational Health provide workplace assessments to identify ergonomic hazards and make recommendations to prevent or reduce injuries and disorders. They also provide recommendations for workplace accommodations for individuals with disabilities by recommending modifications to the work environment and assistive technology solutions. Ergonomic in-

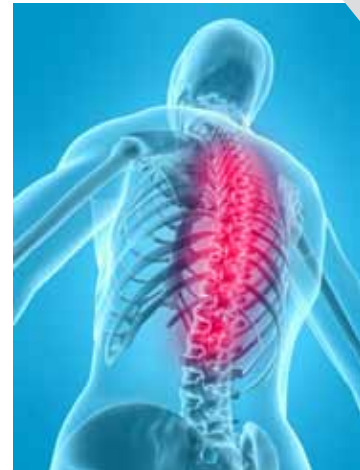
terventions not only protect the health and safety of the workforce, but also reduce absenteeism, increase employee satisfaction, and improve productivity.

I have some pain, but it doesn't bother me all the time.

Be mindful of any aches and pains. Work-related MSDs typically have a gradual onset and a worsening of symptoms over time. If you have an injury or any type of recurring discomfort, you should report it immediately to your supervisor and obtain a medical evaluation from an occupational medicine physician who specializes in work-related health conditions. Early intervention is critical and can prevent lengthy periods of discomfort and chronic conditions.

How can I eliminate awkward positions and discomfort while working?

- Be aware of how you use your body while performing tasks and how your workspace is set up.
- Avoid maintaining positions and postures for extended periods of time.
- Vary your routines and multitask when you can.
- Take microbreaks (30 seconds-1 minute). Stretch, stand, and move around when you can in order to give your muscles a chance to recover. Set a reminder for yourself so you don't forget.
- Use furniture and equipment that fits well to your size and build.
- Exercise for general health and fitness, including strengthening your core muscles to help sustain good posture.



For more information

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