

MUSCULOSKELETAL DISORDERS

What is a Musculoskeletal Disorder?

The term RSI or Repetitive Strain Injury is now referred to more commonly as Musculoskeletal Disorders (MSDs). MSDs is an umbrella term for injuries and disorders of the muscles, tendons, nerves, joints and other soft tissues of the body. There is a strong link between MSDs and known workplace risk factors and hazards. Every year, the last day of February is set aside to promote worker awareness of these injuries and prevention of the hazards that cause them.

Each person is unique in size, strength, endurance, flexibility, knowledge, experience and skill. Because of these differences, the fact that one person can perform a job without suffering an MSD does not mean everyone will be able to. Jobs should be designed for a variety of workers.

Sometimes the tasks required of us at work or the way we do them puts too much demand on our bodies, causing pain and discomfort and leading to a more serious injury called a Musculoskeletal Disorder. The human body is an amazing machine, but it also has its limitations. MSDs are a problem because they can affect every aspect of a worker's life when the demands of their job exceed the capabilities of their body. The back is most commonly affected, followed by the shoulders, neck, elbow, hands and wrists.

SYMPTOMS of MSDs

- Pain with or without movement
- Swelling and tenderness
- Reduced range of motion and/or stiffness
- Tingling and/or numbness

The Occupational Health and Safety Act requires employers to:

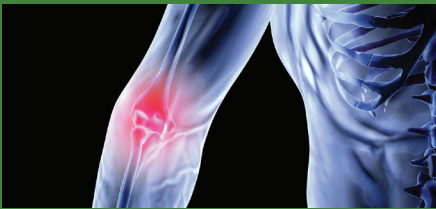
- Ensure that workers are made aware of the hazards associated with their jobs and workplaces,
- Implement controls to reduce the risk of injury due to these hazards, and
- Take every precaution reasonable in the circumstances to protect a worker.

Prevention is key! Reducing the risks of MSDs in your workplace will contribute to a healthy and productive workforce.



Key MSD hazards

FORCE is the amount of effort exerted by the muscles. Lifting a heavy load that is far from the body, for example, increases the load on the lower back, which can damage the spinal discs and vertebrae. Lifting, lowering, carrying, pushing, pulling, gripping and manipulating objects all require a lot of force. The weight of objects, the length of forceful exertion, repetition and body posture are all important to consider when determining the impact of force.



POSTURE is the position of various parts of the body during an activity. For most joints, a good or 'neutral' posture means the joints are being used near the middle of their full range of motion. The farther a joint moves away from a neutral position and toward either end of its range of motion, the more awkward or poor the posture becomes and the more strain there is on the muscles, tendons and ligaments around the joint. For example, fully stretched out arms mean the elbow and shoulder joints are at the end of their range of motion. If a worker pulls or lifts repeatedly in this position there is a higher risk of injury. Consider how long workers need to hold a specific (fixed) posture, the frequency of use of that awkward posture, and the amount of force being exerted when in that awkward posture.

REPETITION increases the risk of developing an MSD when the same parts of the body are used repeatedly with few breaks or chances to rest. Highly repetitive tasks can lead to fatigue, tissue damage and eventually pain and discomfort. This can occur even if the level of force is low and the work postures are not very awkward. The MSD risk increases if the repetitive action also requires high force and/or an awkward posture. The MSD risk associated with repetition increases as the number or speed of action increases because the muscles must exert higher levels of force, the joints move farther away from the neutral position and the length of time without a break increases.

Prevention does not need to be difficult or complex. These hazards should be addressed in the same way you would any other hazard in the workplace – recognition and identification, assessment and control.

Other factors that should be considered as possible risk factors for MSDs include contact stress such as resting the forearms on the hard edge of a desk, which can cause damage to tendons, muscles, blood vessels and nerves under the skin. More risk factors to consider when assessing a MSD hazard include: hand/arm vibration, whole-body vibration, extreme temperatures, and work organization and methods.

The goal is to eliminate a worker's exposure to identified hazards. Effective controls do not have to be elaborate or expensive and can often be achieved by implementing simple changes in a work process, workstation layout or effective tool use. Engineering controls reduce or eliminate exposure to a hazard while administrative controls reduce the risk but do not change the physical environment.

Examples of engineering controls:

- Modifying a workstation
- Providing new equipment or tools
- Changing the existing equipment or tools
- Modifying the work process

Examples of administrative controls:

- Establishing written policies and work procedures
- Changing work schedules
- Adjusting staffing
- Training workers
- Rotating workers
- Broadening the job content

Remember, while researching effective ergonomic controls, include the workers who do the job. They are the ones that have the best knowledge of the work and can be of great assistance in eliminating the hazards. Raise any concerns with your Health & Safety Committee members or contact the UFCW Locals 175 and 633 Health & Safety Department for assistance.

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