Musculoskeletal injuries, symptoms and types of injuries

OHS information for employers and workers

Musculoskeletal injuries, symptoms and types of injuries.

Musculoskeletal injuries, or MSIs, are referred to by a variety of different names. They include repetitive strain injuries (RSIs), repetitive motion injuries, cumulative trauma disorders (CTDs), work-related upper limb disorders (WRULDs), and others. In each case, the name is used to describe injuries of the bones, joints, ligaments, tendons, muscles, and other soft tissues.

Key information

Every worker is unique and is affected differently by the work they perform. Not all workers experience the same pain, nor are they injured in the same way.

The hidden injury, the hidden cost

MSIs don't kill workers, but they can have a devastating impact on their lives and livelihoods. A worker in pain loses the ability to concentrate, causing decreases in quality and productivity at work. A worker with muscle weakness will struggle to perform manual tasks, and may not be able to perform them at all. A worker with damaged nerves loses accuracy and placement in fine manipulative work, becomes clumsy and inaccurate and may not respond quickly to danger. A worker with restricted movement cannot complete tasks or can only complete them by putting their body in awkward positions, positions that can cause additional problems.

At the end of the work day, all of these problems are taken home by the worker. Pain, weakness, sensory loss due to nerve damage, and limited movements can interfere with family responsibilities and relationships. Workers may not be able to prepare meals, maintain a clean home, perform household maintenance, or enjoy their hobbies. Parents may lose the ability to hold their children. These physical limitations can lead to emotional stress, damaged relationships, and loss of self-worth.

Types of MSIs

Overexertion injuries

Overexertion injuries involve tissues such as muscles, tendons, and ligaments. These tissues become damaged when they are subjected to a single traumatic event that exceeds their strength or range of motion. The result is a sprain, strain, or tear injury. Lifting, pushing, or pulling injuries are often of this type.

Overuse injuries

As the term suggests, overuse injuries occur when tissues are used too much and the body is unable to repair the damage. Repeated small injuries add up over time, taking hours, days, months, or years to appear. Gripping, reaching, bending, and twisting tasks are often associated with workplace overuse injuries. In moderation, these tasks are no more hazardous than identical activities performed at home. What makes them hazardous is the combination of endless repetition, the use of forceful exertions, performed while in an awkward body position, and without rest or enough time for affected body parts to recover. This situation is more typical of work than any recreational activities or hobbies.

Just working hard and growing older?

The true incidence of overuse injuries in the workplace is difficult to determine because limited movement and increasing pain develop slowly. Since no single event is associated with the start of the symptoms, the cause is difficult to identify. The chronic nature of the pain and disability, and its slow onset, lead many people to believe that it is an inevitable result of working hard and growing older. There is a small but growing awareness that this is not necessarily the case and that such disabilities are preventable.

Every worker is unique and is affected differently by the work they perform. Not all workers experience the same pain, nor are they injured in the same way. The causes of pain and discomfort are not always easy to understand or diagnose. For these reasons, workers and employers need to focus on identifying and preventing injuries.

Physical symptoms

The physical signs and symptoms of MSIs experienced by workers may include any, some, or all of the following: sharp pain, dull aches, tingling or numbness due to compressed nerves, burning sensations, swelling, redness, tenderness to the touch, and pain when the affected body part is moved. In many, if not most cases, the exact mechanism of injury and the precise tissues that have been injured are unknown. This is what makes MSIs, particularly those related to overuse, so difficult to diagnose and treat.

Most workers affected by MSIs go through the following three stages of increasing discomfort and disability. It is very important that workers and employers recognize the signs and symptoms of injury and make changes long before Stage 3 is reached.

Stage 1

- discomfort may persist for weeks or months but is reversible
- most workers experience aching and weakness during work activities, but improve on days away from work
- interference with work tasks is minimal

Stage 2

- discomfort may persist for months
- symptoms begin more quickly and last longer
- physical signs may be present, sleep may be disturbed
- work tasks may be difficult to perform

Stage 3

- discomfort may persist for months or years
- symptoms are present even at rest
- activities of daily living are disrupted and sleep is disturbed
- the worker is unable to perform light duties at work
- the likelihood of recovery is poor

Key information

It is very important that workers and employers recognize the signs and symptoms of injury and make changes long before Stage 3 is reached.

Recovery

Workers who reach Stage 3 of an MSI often require treatment to recover from their injury. If treatment is successful and worker returns to the same job that has not been redesigned through engineering or administrative controls, those workers are at risk of becoming re-injured. *Preventing MSIs through design or redesign of the workplace is the most effective solution.*

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