

# Fact Sheet: Occupational Overuse Syndrome (OOS)

## What is OOS?

**Occupational Overuse Syndrome (OOS)** is the term given to a range of conditions characterised by discomfort or persistent pain in muscles, tendons and other soft tissues. These conditions are usually caused or aggravated by poor work processes and unsuitable working conditions that involve repetitive or forceful movements or the maintenance of constrained or awkward postures. OOS is also known as Repetitive Strain Injury (RSI).

Some of the problems that can be caused by OOS are:

**Carpal Tunnel Syndrome:** Pressure on the median nerve in the wrist, which causes numbness and tingling in the fingers and hand.

**Tenosynovitis:** Pain and swelling of the tendons, often in hands and wrists.

**Epicondylitis:** Pain and tenderness of the muscles and tendons around the elbow.

**Static Muscle Strain:** Occurs when muscles are used to keep part of the body still and stiff for long periods. This can cause pain and stiffness in muscles, often in the shoulders, neck and forearms.

## What are the symptoms of OOS?

Symptoms of OOS often include swelling, numbness, restricted movement and weakness in or around muscles and tendons of the back, neck, shoulders, elbows, wrists, hands or fingers. It may become difficult to hold objects or tools in the hands, affecting your ability to function at work and at home.

Symptoms can vary from person to person and may often involve more than one part of the body.

In the early stages, the pain may be slight. If action is taken immediately, no damage is likely to occur. If no action is taken, the condition may get worse.

Pain may continue while doing other movements or even while not using the injured part of the body at all. Pain generally stops with rest, but prolonged periods of rest may be necessary to reduce severe pain. If nothing is done to redesign the work to eliminate or reduce the risk of injury, then permanent damage may result. (SAFE WORK AUSTRALIA, *Managing Workplace Hazards Factsheets: Overuse Injuries*)

## What can cause OOS?

Any work requiring fast repetitive movements, fixed postures held for long periods or repeated forceful movements, has an OOS risk.

Factors that can contribute to OOS include:

### ***Poorly designed equipment or workstations***

For example: equipment that requires awkward body postures to perform repetitive tasks, such as workbenches that are too high or too low; badly designed tools that require excessive force or are inappropriate to the job; poor workstation layout that requires bending, twisting or stretching to perform a single task; chairs, desks or benches which are not suited to the worker's height.

### ***Repetitive movement***

Repetitive movements are especially hazardous when they involve the same joints and muscle groups over and over and when the same motion is performed too often, too quickly and for too long. Work involving movement repeated over and over is very tiring because the worker cannot fully recover in the short periods of time between movements.

### ***Awkward work postures and movements***

Anybody position can cause discomfort and fatigue if it is maintained for long periods of time. For example working for long periods in a standing position can cause sore feet, general muscular fatigue, low back pain and stiffness in the neck and shoulders.

When parts of the body are near the extremes of their range of movements such as when bending, reaching or twisting, stretching and compression of tendons and nerves occur. The longer a fixed or awkward body position is used, the more likely it is that an injury will develop.

Similarly, holding the neck or shoulders in a fixed position can contribute to OOS. Then the arm performs any controlled movement, muscles in the neck and shoulder contract and stay contracted for as long as the task requires.

The contracted muscles squeeze the blood vessels, which restricts the flow of blood all the way down to the working muscles of the hand. As a result, the neck and shoulder muscles become overtired even though there is little or no movement. At the same time, the reduced blood supply to the rest of the arm accelerates fatigue in the muscles that are moving, making them more prone to injury.

Other risk factors that arise from poorly organised work systems and processes include:

- Unpredictable workflows and inability to control the volume of work.
- Urgent deadlines which may require long shifts or overtime to meet.
- Lack of training and no period of adjustment for employees returning from a period of absence.

## **What can be done to prevent OOS?**

Employers have a legal responsibility to provide a safe and healthy workplace for employees. This includes:

- Providing appropriate equipment and workstations for the job, such as ergonomically designed, adjustable furniture, chairs, desks and computers.
- Ensuring that the work area is arranged so that materials, equipment and controls can be easily reached without stretching or twisting.
- Ensuring that hand tools for repetitive tasks are a comfortable size, shape and weight, are well-balanced with a comfortable grip and require no more than reasonable force to operate.
- Providing training and information to employees about safe working practices, for example correct work methods and postures and the correct use of tools, machinery and other equipment.
- Ensuring that equipment is regularly maintained and replaced as needed and that new equipment is assessed on health and safety grounds before purchase.
- Workers should be consulted on job design and organisation.
- Working positions should be changed frequently.
- Work should be organised to mix repetitive and non-repetitive tasks.
- Where a job cannot be varied or rotated, frequent, short rest breaks should be introduced. Ten to fifteen minutes every hour is generally suggested, which may be broken up into half of this time every half hour.
- Simple and gentle exercises and stretches performed at the workstation can also be used to reduce muscle tension.
- Work rates should be reviewed and set after consultation with employers and workers, including Occupational Health and Safety Committees to ensure that they are realistic and within a worker's capabilities.
- Workers should be allowed an adjustment period when they return to work after an absence for holidays or illness to allow for a gradual return to a regular work pace. This could be achieved by a slower work rate, more frequent breaks or job rotation.

## **Reporting symptoms of OOS**

With occupational overuse syndrome, early reporting is essential in order to identify and treat the condition while it is still reversible. There is a very clear connection with early reporting of symptoms. Do not ignore physical discomfort - report any symptoms of OOS to management and to health and safety representatives.

## Treating OOS

The basic treatment for OOS is **rest from aggravating factors** including work, household duties and other formal tasks. Other treatments may help by relieving symptoms, but should be stopped if the condition worsens.

### **Some common treatments are:**

- Physiotherapy, vibration, massage, application of heat and cold, acupuncture and manipulative therapies
- Anti-inflammatory and painkilling tablets
- Pain management therapies
- Hydrotherapy
- Surgery

It is very important that the workplace is changed to remove the factors that caused the injury.