Ergonomics and Manual Handling

– Ergonomics

Occupational overuse syndrome >

This information bulletin provides information on Occupational Overuse Syndrome (OOS). This bulletin should be read in conjunction with other resource material, which has been listed in this bulletin. Many people would have heard of the term Repetitive Strain Injury or RSI. This term has been replaced by the more correct term of OOS as repetition has been found to be only one of the factors involved in this condition.

What is occupational overuse syndrome?

It is a generic term that is used to describe a large group of ailments that have occurred due to the nature of a person's work or the manner in which they are performing it. Typically this group of ailments can include inflammatory conditions of the tendons or muscles of the wrist, fingers and forearms. It can also include pain in the arms, shoulders, neck or for that matter any area of the body that is overloaded by the type or nature of the job.

How would I know if I had OOS?

The symptoms of OOS are many and varied but usually they start as a general ache or tingling in the affected part that comes on after a period of work or at the end of the day. These symptoms, if untreated, can worsen to constant pain or numbness that affects not only the work but day to day activities also. In a very few cases the results can be significantly debilitating, so prevention and early intervention are the key to controlling OOS.

What causes OOS?

There are many risk factors that are known to contribute to the incidence of OOS. Following is a list of some of those factors and what can be done about them -

Poor workstation and workplace layout

- Make sure the workstation suits the postural requirements of the worker. Purchase adjustable furniture only after considering the task it is required for and the person or persons who will perform the task. Look at the work processes to reveal situations where better work organisation will reduce the physical stress on the worker.

Often improving work organisation will increase productivity as well as safety.
See NT WorkSafe information bulletin 06.01.08 Keyboard workstation assessment checklist.

Poor or prolonged working postures

- Poor posture is best addressed by making the changes suggested above however even good postures should not be maintained indefinitely. Anyone engaged in an activity that involves prolonged postures should take regular short breaks (micro breaks), that can be as little as one minute to do some simple stretches or movements that reverse the position they have been maintaining (eg. if you have been sitting, stand and arch your back).

Excessive duration and high frequency activities

- These activities should be broken up by increasing the variety of work. This allows tired muscles to recover while different muscle groups are being used. Most workers are more mentally stimulated by the increased variety as well.

High forces applied

- Using force to hold, move or restrain an object requires a great deal of muscular effort. Where possible the worker should not be required to exert forces which they find uncomfortable.

Poor work organization

- Giving the worker more control over the workflow can reduce the risk of injury. Likewise, bonus and piece rate systems through their effect on workflow and on work organization can increase risk.

Lack of skills and experience

- Training and education programs are essential to the success of any injury prevention program.

Other personal or individual factors

- For example, if a person is away from work for a length of time, they will require a period of adjustment to return to previous working rates. The adjustment period will depend on the individual and on the length of their absence.

If your work involves one or more of these factors then you are more likely to develop symptoms of OOS. To prevent the development of OOS the jobs, tasks and the work environment (including furniture and equipment) need to be designed such that all the factors that contribute to the risk of injury can be avoided or minimized.

Standards Australia 'Occupational overuse sydrome – Preventative guidelines (HB 10 – 1987) gives clear guidelines on how to manage OOS.

Other resources that should be read in conjunction with this information bulletin are:

1. ASCC website for more information
2. Ergonomics & Manual Handling NT WorkSafe information bulletins 06 Series.

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