

MUSCULOSKELETAL DISORDERS

Musculoskeletal Disorders (MD) refers to a wide range of conditions and injuries. They are broadly divided into two types; Manual Handling related such as backache, slipped discs, and sciatica; and Work Related Upper Limb Disorders (WRULD) such as Repetitive Strain Injury (RSI) Tennis Elbow and Writers Cramp.

It has been estimated that some 600,000 people each year develop MD at a cost to employers of £1.25 billion. Apart from the pain and suffering to employees you must consider the losses which your business could suffer through lost time and possible litigation, as well as your legal duty to reduce the risks of such injury so far as is reasonably practicable (see *Advice Sheet 3*).

Decide If You Have a Problem

Employees with the following symptoms may have a problem:

- Aches and pains
- Swelling, numbness and tingling in hands, fingers etc
- Stiffness in joints
- Difficulty in movement

Manual Handling Injuries mainly affect the back, arms, fingers and legs. WRULDs mainly show themselves in the hands, wrists, arms and shoulders.

There may be a previous history of ULD within your business.

Address the Problem

- Avoid Manual Handling Operations, and risk assess those which remain (see *Advice Sheet 5*)
- Carry out a risk assessment of WRULD (see Supplementary Sheets)

Risk Factors to look for when assessing tasks in relation to ULDs are:

- Activities which require a lot of force
- The need for rapid, awkward or frequent movement
- Awkward or static postures
- Work for long periods without breaks or changes of activity
- No special arrangements for new starters, or those returning to work after a long break.
- Poor environmental conditions, particularly vibration and low temperature.

There is some evidence that WRULDs increase with increasing intensity or duration of exposure. Consider also that employees may feel under stress where they carry out highly detailed work and there is lack of control over its speed and organisation,

along with poor supervisory style or lack of support from management. This may lead to:

- Physical responses (e.g. muscle tension)
- Changes in behaviour, such as adopting poor work methods or taking fewer rest breaks

Implement Your Solutions

There are a number of approaches to risk reduction, which include

- Workplace redesign
 - improve posture to avoid extreme joint postures
 - ensure good thermal environment
 - provide stable fixtures/jigs for assembly tasks
- Task redesign
 - reduce load or force exerted
 - provide appropriate tools
 - remove or reduce vibration
 - give variation in tasks
- Product development
 - reduce number and complexity of fasteners and other components
 - redesign outer packaging for easier packing
 - reduce product bulk and weight
- Work organisation
 - avoid pacing and set work rates which are achievable across a shift
 - consider effects of payment system on work stress or behaviour
 - provide breaks away from the workstation
 - provide training in task methods and workstation adjustment
 - consider work rates for new employees and those returning (develop task fitness)

Monitor the Effects

You will have to check that the measures you are taking are effective, otherwise there is no point in investing in them.

- Have you achieved any targets you have set?
- Are sickness absence and employee complaints reducing?
- Is new equipment working properly and being maintained?
- Are employees using new tools and methods, not the old ones?
- Is training and refresher training up to date?

Managing musculoskeletal disorders is a process of continuous improvement. You will need to review and revise your assessments on a regular basis as your business changes and develops. However tackling these issues will improve the health of your employees and increase the efficiency and productivity of your business.

What if I need further help?

- Consult your Trade Association
- Employ an ergonomist
- Consult an Occupational Health provider
- Approach your local enforcing authority
- Contact the Employment Medical Advisory Service (EMAS) through your local area Health & Safety Executive.

Further information

1 The Ergonomics Society, Devonshire House, Devonshire Square, Loughborough, LE11 3DW; The Institute for Occupational Ergonomics, School of Materials, Manufacturing, Engineering and Management, University of Nottingham, University Park, Nottingham, NG7 2RD;

2 See 'About this Pack', above.

HSE Publications; Work Related Upper Limb Disorders, HS(G)60; Lighten the Load – Guidance for employers on musculoskeletal disorders, IND(G)109(L); In the Driving Seat, IND(G)242(L); Checkouts and Musculoskeletal Disorders, IND(G)269