

# Aching arms (or RSI) in small businesses

*Is ill health due to upper limb disorders  
a problem in your workplace?*



This booklet is designed to help employers and managers in small businesses to understand Upper Limb Disorders (ULDs), which are often called 'RSI' (repetitive strain injury).

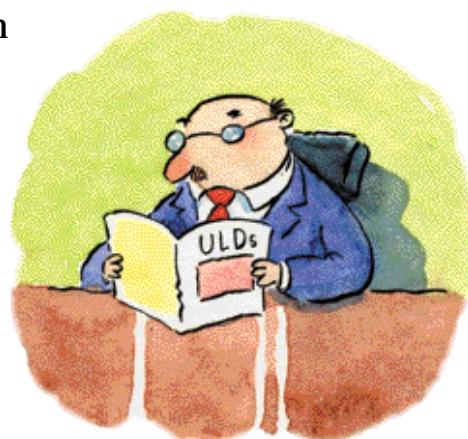


ULDs can have a bad effect on your business because they are a very common form of ill health caused or made worse by work. A survey carried out in 1995 estimated that in that year, half a million people in Great Britain were suffering from a ULD due to their current or past work. On average, each sufferer took 13 days off work in that year.

ULDs can be a serious problem, but it is possible to tackle them effectively by managing the risks. You are more likely to succeed if you tackle them in partnership with your workers.

In the following pages we explain:

- what ULDs are;
- their symptoms;
- how you can avoid them; and
- what you can do to help.



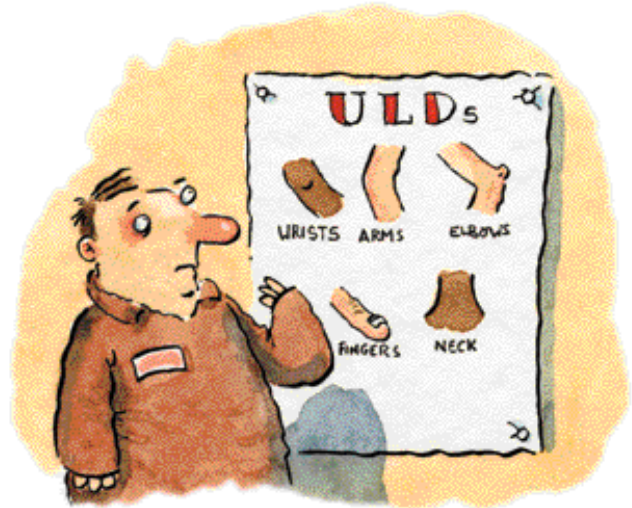
It is important to try to stop people being made ill by work, but you may not always be successful. You should encourage them to report any signs and symptoms. Where workers have been affected, encourage them to return to work to carry out light duties as soon as they are able.

You can find more detailed information in HSE's priced publication *Upper limb disorders in the workplace* (see 'Where do I get further information?').

If workers are using computers, employers should comply with the requirements of the Display Screen Equipment Regulations 1992 (as amended 2002), and there is separate HSE guidance available on this (see 'Where do I get further information?').

## **What are ULDs?**

They are problems with the shoulder and arm, including the forearm, elbow, wrist, hand and fingers. ULDs can include neck pain.



## **What type of work can lead to ULDs?**

ULDs are widespread across a range of industries and jobs. Any type of work that involves a worker using their arms to carry out tasks, can lead to ULDs. Computer use and assembly work are frequently associated with ULDs, but there are many other tasks that may have higher risks.

## **What causes a ULD?**

It can be caused by a variety of work tasks involving, for example, forceful or repetitive activity, or by poor posture. The way that the work is organised and managed can cause ULDs as well as make them worse.

## **What are the symptoms?**

There is a wide range of symptoms, such as tenderness, aches and pain, stiffness, weakness, tingling, numbness, cramp, or swelling. The symptoms may be slight, but even if they are, they should not be ignored. Something may be wrong which needs to be dealt with.

## **What is the difference between RSI and ULDs?**

They basically refer to the same conditions, although the term repetitive strain injury (RSI) is used by some to refer to pain in the arm when working with computers. The term ULDs covers a range of over 20 medical conditions. HSE prefers to use the general term ULD because problems might not be due to strain and there may not be any sign of injury.

## Managing ULDs

As an employer, you have a legal duty under the Health and Safety at Work etc Act 1974 and Management of Health and Safety at Work Regulations 1999 to prevent work-related ULDs or to stop any cases getting worse. If you do not manage the risk of ULDs to workers you run the risk of legal action and possible compensation costs.



ULDs can be successfully managed in the workplace by:

- assessing the risks - this means looking around your workplace to see which jobs may cause harm;
- reducing the risk of ULDs – this could mean changing the way work is organised;
- helping sufferers back to work.

Further information is given in the next few pages.

You are more likely to succeed if you:

- involve workers and their safety representatives early and at every stage;
- provide information and training to all those involved;
- design the job to fit the worker.



A worker can develop a ULD as a result of activities outside the workplace.

In this case, you need to ensure that this worker's tasks do not make the injury worse.

## Assessing the risks of ULDs in your workplace

To help you find out which tasks are 'risky', watch workers as they carry out their jobs, ask them about any problems and check any illness/injury records.

The main areas that are likely to increase the risk of ULDs are listed in the table below. They can interact with each other to increase the risk.

HSE have published a series of questions to help you decide if there is a problem. These can be found in *Upper limb disorders in the workplace* and on the HSE website (see 'Where do I get further information?').

<p><i>Repeating an action</i></p>	<p>This uses the same muscles over and over again. The more a task is repeated, the greater the risk. The speed at which the job becomes 'risky' depends on the task itself. Movement of the whole arm at low speed may be just as risky as small but quick movements.</p>
<p><i>Uncomfortable working positions</i></p>	<p>These include moving the arm to an extreme position, eg working above head height, working with a very bent elbow, or holding something in the same place for a period of time.</p>
<p><i>Using a lot of force</i></p>	<p>This includes handling heavy objects, carrying out fast movement or having to overcome friction, such as undoing a bolt.</p>

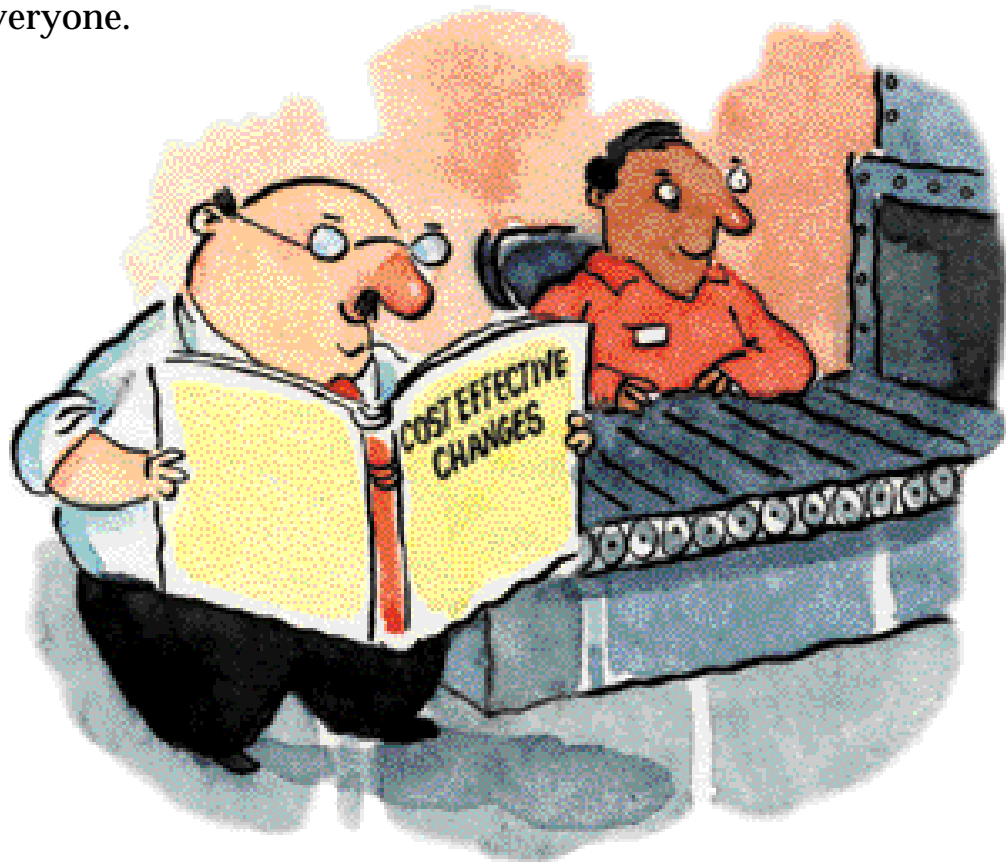


<i>Carrying out a task for a long period of time</i>	The risk of injury generally increases with the length of time that a task is carried out. Carrying out a task for a short period of time is unlikely to cause an injury, except where the task requires a lot of effort.
<i>Poor working environment</i>	Working in cold temperatures or handling cold items; dim light, shadow or glare which causes a worker to adopt an awkward position to see better; and vibration can increase the risk of ULDs.
<i>Underlying effects of the work and conditions</i>	They include lack of control over the work and its speed, excessive demands, fears over loss of job, and lack of status. They are sometimes called psychosocial issues.
<i>Workers' individual differences</i>	Individuals are different in terms of their body size and reach, age, ability (particularly in the case of new or pregnant employees), health and disabilities. Some workers are more affected by certain risks. Some may differ in their attitude towards safe working practices and in reporting any symptoms.

## Reducing the risk of ULDs

If your investigations (known as a risk assessment) show that there is a problem, the following section provides some helpful suggestions for reducing the risks. A few general tips are:

- changes do not necessarily need to be expensive. Simple and low cost changes can often be effective;
- try to consider risk when setting up new workstations. It is cheaper than redesigning them or purchasing more suitable tools at a later stage;
- tackle the serious risks or those that affect a large number of workers first;
- try to make the task and workstation suitable for each worker, rather than make the worker adapt to fit the task and workstation;
- test any changes on one or two workers before making changes for everyone.



<p><i>Reducing repetition</i></p>	<ul style="list-style-type: none"><li>✓ Break up work periods involving a lot of repetition with several short breaks instead of one break at lunchtime or mid-shift.</li><li>✓ Allow for short, frequent pauses for very intensive work.</li><li>✓ Mechanise higher risk tasks.</li></ul>
<p><i>Finding the right working position</i></p>	<ul style="list-style-type: none"><li>✓ Design workplaces and equipment for workers of different sizes, build, strength and for left-handed workers.</li><li>✓ Provide platforms, adjustable chairs and footrests, and tools with a suitable size grip.</li><li>✓ Arrange the position and height and layout of the workstation so that it is appropriate for the work.</li></ul>
<p><i>Reducing the amount of force</i></p>	<ul style="list-style-type: none"><li>✓ Reduce the weight of items, or the distance moved or slide them instead of lifting.</li><li>✓ Provide levers.</li><li>✓ Provide lightweight tools and, if not, a support, jig or counterbalance will help.</li><li>✓ Purchase low vibration tools and maintain them properly so that they are not stiff.</li><li>✓ Distribute force, eg over the palm of the hand and not just one finger.</li></ul>



<p><i>Reducing the length of time that a task is carried out</i></p>	<ul style="list-style-type: none"><li>✓ Share a high-risk task among a team by rotating workers between tasks (each task needs to be sufficiently different to benefit the worker).</li><li>✓ Allow workers to carry out more than one step of a process (provided the steps do not have the same risks).</li><li>✓ Introduce short frequent breaks in the more risky activities (but not necessarily a rest).</li></ul>
<p><i>Improving the working environment</i></p>	<ul style="list-style-type: none"><li>✓ Make sure that the temperature is reasonable, and avoid putting workstations too near air vents.</li><li>✓ Make sure that the lighting is good or provide a personal lamp. Avoid reflections and glare by moving lights, providing blinds on windows, or moving workstations.</li></ul>
<p><i>Tackling the underlying effects of work or conditions</i></p>	<ul style="list-style-type: none"><li>✓ Encourage teamwork, and provide good communication between workers and management.</li><li>✓ Rotate workers between tasks to reduce boredom.</li><li>✓ Watch the production speed to keep the workload reasonable.</li><li>✓ Train workers so that they feel able to do the task.</li><li>✓ Get the right balance for bonus schemes as such schemes could encourage workers to work beyond their natural limits.</li><li>✓ Involve workers in decisions about them and their work.</li></ul>

## Dealing with ULDs

It may not be possible to prevent all cases of ULDs, because workers respond differently to the risks. Anyone with a ULD needs to be helped to prevent it getting worse. Encourage workers to report any signs and symptoms early before they become too serious, and seek medical help if necessary.

People with ULDs usually completely recover if the problem is recognised early and treated appropriately. The approach in most cases is for the affected person to rest their arm/hand to reduce inflammation. Physiotherapy may help. If you find that a task is causing or contributing to a ULD, you should stop the worker from doing that task.

If a worker has been off work suffering from a ULD, the timing of their return depends on medical advice. But it is possible to return before all the symptoms have cleared up totally. When someone returns to work it is preferable for them to carry out light duties or reduced hours to start with.



So remember...

- things can be done to prevent or minimise ULDs;
- preventative measures are cost-effective;
- you cannot prevent all ULDs, so early reporting of symptoms, proper treatment and suitable rehabilitation is essential.

## **Where do I get further information?**

*Upper limb disorders in the workplace* HSG60 (Second edition) HSE Books 2002 ISBN 0 7176 1978 8

*A pain in your workplace? Ergonomic problems and solutions* HSG121 HSE Books 1994 ISBN 0 7176 0668 6

*The law on VDUs: An easy guide: Making sure your office complies with the Health and Safety (Display Screen Equipment) Regulations 1992 (as amended in 2002)* HSG90 (Second edition) HSE Books 2003 ISBN 0 7176 2602 4

*Working with VDUs* Leaflet INDG36(rev2) HSE Books 2003 (single copy free or priced packs of 10 ISBN 0 7176 2222 3)

*Control the risks from hand-arm vibration: Advice for employers on the Control of Vibration at Work Regulations 2005* Leaflet INDG175(rev2) HSE Books 2005 (single copy free or priced packs of 10 ISBN 0 7176 6117 2)

*Understanding ergonomics at work: Reduce accidents and ill health and increase productivity by fitting the task to the worker* Leaflet INDG90(rev2) HSE Books 2003 (single copy free or priced packs of 15 ISBN 0 7176 2599 0)

HSE's website: [www.hse.gov.uk](http://www.hse.gov.uk) provides information and other links. Particular information on musculoskeletal disorders (MSD), which include ULDs, can be found on HSE's MSD webpage: [www.hse.gov.uk/msd](http://www.hse.gov.uk/msd).

For information about health and safety ring HSE's Infoline  
Tel: 0845 345 0055 Fax: 0845 408 9566 Textphone: 0845 408 9577  
e-mail: [hse.infoline@natbrit.com](mailto:hse.infoline@natbrit.com) or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

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This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

This leaflet is available in priced packs of 15 from HSE Books, ISBN 0 7176 2600 8. Single free copies are also available from HSE Books.

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