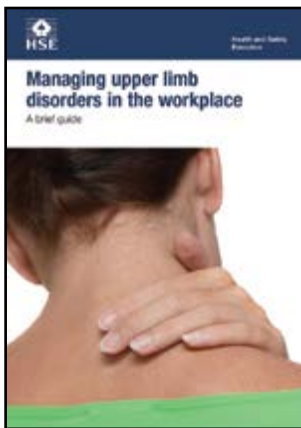


# Managing upper limb disorders in the workplace

A brief guide



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## Introduction

This brief guide describes what you, as an employer, need to do to protect your employees from the risk of injury and ill health from upper limb disorders (ULDs) in the workplace. It will also be useful to employees and their representatives.

## What are ULDs?

ULDs are conditions which affect the muscles, tendons, ligaments, nerves or other soft tissues and joints in the upper limbs such as the neck, shoulders, arms, wrists, hands and fingers. They are often called repetitive strain injuries (RSI), cumulative trauma disorder or occupational overuse syndrome.

ULDs can be caused or made worse by work. In the following pages we explain:

- causes and symptoms;
- how to assess the risks;
- what you can do to help manage and control the risks.

## What does the law say you must do?

As an employer, you have general duties under the Health and Safety at Work etc Act 1974 and the Management of Health and Safety at Work Regulations 1999 to manage and control the risks associated with work-related ULDs.

If workers are using computers, employers should comply with the requirements of the Display Screen Equipment Regulations 1992, see *Work with display screen equipment* for more information (see 'Further reading').

## 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, eg computer use and assembly work.

## What causes a ULD?

Various factors have the potential to cause ULDs, such as:

- repetitive work;
- uncomfortable working postures;
- sustained or excessive force;
- carrying out tasks for long periods without suitable rest breaks;
- poor working environment and organisation.

## What are the symptoms?

There is a wide range of symptoms, such as tenderness, aches and pain, stiffness, weakness, tingling, numbness, cramp, or swelling.

## Managing ULDs

ULDs can be managed in the workplace by:

- assessing the risks – this means looking around your workplace to see which jobs may cause harm;
- deciding how likely it is that harm will occur, ie the level of risk, and what to do about it;
- changing the way work is organised to help reduce risk;
- helping sufferers when they come back to work.

You should consult employees on risks arising from their work and provide clear instructions, information and adequate training on any measures you put in place to control the risks.

The way jobs are designed, organised and managed can make a significant contribution to reducing the risk of ULDs. Employees may be more likely to suffer an upper limb problem if exposed to more than one factor. However, just because a worker is exposed to these factors does not necessarily mean they will develop a ULD or that the risks cannot be adequately controlled.

## Assessing the risks of ULDs in your workplace

There are two main approaches you can use to assess and identify if you have a problem in your workplace. You can look for any signs of problems or symptoms in the workforce. Or, you can observe work tasks to see if there are factors that could lead to ULDs.

Factors likely to cause ULDs are listed in Table 1. They can interact with each other to increase the risk. HSE have also 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 'Further reading').

Consider the following assessment of certain tasks and the individual's requirements.

Table 1

Factor	Observations	Control measures
<p><b>Repeating an action</b></p>	<p>This uses the same muscles over and over again. The more a task is repeated, the more potential for developing a ULD.</p> <p>Also consider the speed at which the job is carried out. Moving the whole arm at low speed may be just as much a problem as quick movements, such as using an extension tool where access is restricted.</p>	<p>Break up prolonged work periods involving repetition with changes to activity instead of one break at lunchtime or mid-shift.</p> <p>Mechanise higher risk tasks.</p>
<p><b>Uncomfortable working positions</b></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>Design workplaces and equipment with the employee in mind. Consider providing platforms, adjustable chairs and footrests, and suitable tools.</p> <p>Arrange the position, height and layout of the workstation so it is appropriate for the work.</p>
<p><b>Using a lot of force and handling heavy objects</b></p>	<p>This may include using excessive force or having to overcome friction, such as undoing a bolt.</p> <p>Handling/carrying heavy items may have an impact.</p> <p>Working with equipment and tools that vibrate can increase the risk of ULDs.</p>	<p>Provide levers, lifting aids and, if possible, lightweight tools, eg using jigs and counterbalance equipment may help.</p> <p>Reduce the weight of items, eg reduce the size of an item (for unpacking/loading tasks). Reduce the distance an item needs to be carried, or slide the item instead of lifting it.</p> <p>Buy low vibration tools and maintain them properly, so they are not stiff.</p> <p>Distribute force, eg over the palm of the hand, not just using one finger.</p>

**Table 1 continued**

<b>Factor</b>	<b>Observations</b>	<b>Control measures</b>
<b>Carrying out a task for an extended period of time</b>	Work linked to shift patterns and production with limited scope for job rotation may present problems.	<p>Share a high-risk task among a team by rotating people between tasks (each task needs to be sufficiently different to benefit the worker).</p> <p>Allow employees to carry out more than one step of a process (provided the steps do not have the same risks).</p> <p>Introduce changes in activity or rotate tasks to reduce exposure to risks.</p>
<b>Poor working environment</b>	<p>Working in uncomfortable temperatures or handling hot/cold items.</p> <p>Working in dim light, in shadow or glare which causes a worker to adopt an awkward position to see better.</p>	<p>Reduce/control the levels of exposure to uncomfortable temperatures, eg reasonable working temperatures in workplaces inside buildings (usually at least 16 °C, or 13 °C for strenuous work, unless it is impractical to do so, eg in the food industry).</p> <p>Provide local heating or cooling where a comfortable temperature cannot be maintained and avoid putting workstations too near air vents.</p> <p>Make sure the lighting is good or provide suitable adjustable lighting such as a desk lamp. Avoid reflections and glare by moving lights, providing blinds on windows, or moving workstations.</p>
<b>How the work is organised</b>	A lack of control over the work rate or any excessive task demands, can have an impact.	<p>Dutyholders are required to consult employees on health and safety matters.</p> <p>Consider job rotation to reduce exposure to risks and encourage teamwork.</p>

Table 1 *continued*

Factor	Observations	Control measures
<b>Employee capability</b>	People are different in terms of body size, age, ability, health and may have disabilities to consider when exposed to certain tasks.	<p>Monitor work rates to assess the risks from excessive workload.</p> <p>Provide suitable training and information.</p> <p>Consider involving employees in decisions about their work.</p>

## Reducing the risk of ULDs

If your assessment shows 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, eg introduce job rotation;
- consider risks when setting up new workstations. It is cheaper than redesigning them or purchasing more suitable equipment at a later stage;
- tackle the serious risks or those that affect a large number of employees first;
- trial any new work practices before rolling them out across the workplace.

See [www.hse.gov.uk/risk](http://www.hse.gov.uk/risk) for more information about risk assessment.

## Dealing with ULDs

It may not be possible to prevent all cases of ULDs, because employees respond differently to risks. Anyone with a ULD needs to be informed how to prevent it getting worse.

Encourage employees to report any signs and symptoms to you, at an early stage, before they become too serious, so medical help can be sought by you or the individual.

People with ULDs can 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 employees doing that task.

If an employee has been off work suffering from a ULD, the timing of their return depends on medical advice. The employee's GP and, if available, an occupational health specialist will determine the best way for the employee to return to work.

So remember...

- things can be done to prevent or minimise ULDs;
- preventative measures may be simple and cost-effective;
- early reporting of symptoms and ensuring risks are assessed and controlled is essential.

## **Further reading**

*Hand-arm vibration at work: A brief guide* Leaflet INDG175(rev3)  
HSE Books 2012 [www.hse.gov.uk/pubns/indg175.htm](http://www.hse.gov.uk/pubns/indg175.htm)

*Upper limb disorders in the workplace* HSG60 (Second edition) HSE Books 2002  
ISBN 978 0 7176 1978 8 [www.hse.gov.uk/pubns/books/hsg60.htm](http://www.hse.gov.uk/pubns/books/hsg60.htm)

*Working with display screen equipment (DSE): A brief guide* Leaflet INDG36(rev4)  
HSE Books 2013 [www.hse.gov.uk/pubns/indg36.htm](http://www.hse.gov.uk/pubns/indg36.htm)

*Work with display screen equipment. Health and Safety (Display Screen Equipment) Regulations 1992 as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002. Guidance on Regulations L26* (Second edition)  
HSE Books 2003 ISBN 978 0 7176 2582 6 [www.hse.gov.uk/pubns/books/l26.htm](http://www.hse.gov.uk/pubns/books/l26.htm)

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

## **Further information**

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit [www.hse.gov.uk](http://www.hse.gov.uk). You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory, unless specifically stated, and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance.

This leaflet is available at: [www.hse.gov.uk/pubns/indg171.htm](http://www.hse.gov.uk/pubns/indg171.htm).

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