

# Electricity Industry Occupational Health Advisory Group



## Guidance Note 4.2

# Upper limb disorders in the Electricity Industry

The Occupational Health Advisory Group for the Electricity Industry (OHAG) is an independent body of senior occupational physicians. They all have a professional role to provide advice to individual companies in the electricity industry and they meet together three times a year to discuss matters of common interest and to promote good practice in occupational health across the industry. The main route for doing this is by the preparation of guidance notes on topics of interest to the industry. The remit of OHAG and its guidance covers all aspect of the industry from generation, through transmission and distribution to retail and supply.

Until now the promulgation of this OHAG guidance has largely been by means of paper copies of the documents circulating within individual companies in the electricity industry. OHAG recognises that there is a need to make these papers more widely available and is grateful for the support provided by the Energy Networks Association (ENA) in hosting these documents on their website, and the links to them from the websites of the Association of Electricity Producers (AEP) and the Energy Retail Association (ERA).

The guidance notes will be of interest to managers, employees and occupational health professionals within the industry. They give general advice which has to be interpreted in the light of local circumstances. Health professionals using the guidance, retain an individual responsibility to act in accordance with appropriate professional standards and ethics. This guidance is offered in good faith and neither the individual members of OHAG, the companies they support, the ENA, AEP or the ERA can accept any liability for actions taken as a result of using the guidance.



## **Upper limb disorders in the electricity industry**

### **1. Introduction**

Upper Limb Disorders are a range of conditions affecting the muscles, tendons, ligaments and nerves of the upper limbs. These disorders are very common and are not always work related. Where the cause of the disorder may be associated with the workplace, the term Work Related Upper Limb Disorder (WRULD) is used. Historically the condition has been associated with key board use, but it can occur in any occupation where tasks are performed which involve repetitive movements, awkward postures, or the application of excessive force. In situations where the condition has arisen outwith work, the problem can be aggravated by jobs involving these risk factors.

In the Electricity Industry WRULDs may be caused by duties that involve prolonged keyboard work, fine repetitive tasks such as cable jointing, operating power tools or heavy manual work. A good review of all aspects of work related neck and upper limb musculoskeletal disorders is available on the website of the European Agency for Safety and Health, see references.

### **2. Aims of this Document**

The aims of this document are to:

- provide an introduction to the key principles of managing the risks of upper limb disorders in the workplace
- encourage a structured approach to the prevention and clinical management of upper limb disorders

### **3. Relevant Legislation**

- Management of Health and Safety at Work Regulations 1999
- Reporting of Injuries Diseases and Dangerous Occurrences Regulations 1995
- Social security (Industrial Injuries) (Prescribed Diseases) Regulations 1985
- Disability Discrimination Act 1995



#### 4. Relevant Guidance

- 'Upper limb disorders in the workplace', HSG60(rev), HSE Books 2002
- 'Managing sickness absence and return to work', HSG 249, HSE Books 2004
- OHAG Guidance Note 4.1: Noise and Vibration
- OHAG Guidance Note 1.2: The role of occupational health in the management of absence attributed to sickness
- OHAG Guidance Note 1.4: Workplace rehabilitation

#### 5. Common upper limbs disorders

Names in common use for these disorders include the following:

<b>Medical Name</b>	<b>Part of Body Affected</b>
Supraspinatus Tendonitis (Rotator Cuff tendonitis)	Shoulder
Lateral Epicondylitis (Tennis Elbow)	Elbow
Medial Epicondylitis (Golfers Elbow)	Elbow
Olecranon Bursitis (Students Elbow)	Elbow
Peritendinitis Crepitans	Lower third of Arm
Carpal Tunnel Syndrome	Wrist
Tenosynovitis	Wrist/Hand
Ganglion	Back of Hand or Wrist
De Quervain's Disease	Wrist/Thumb
Trigger Finger	Thumb or Finger

Other diagnoses commonly seen on medical certificates include "RSI" and "overuse syndrome". This should alert line managers to the possibility of an upper limb disorder. However, these disorders may just consist of a set of symptoms affecting the fingers and hands, wrist, elbow or shoulders, and are sometimes referred to as Type 2 WRULDs in contrast to the specific disorders listed above, see the textbook by Hutson in the reference list for more details.

Common symptoms of Type 2 disorders are:

- persistent pain
- swelling
- restricted movement
- altered sensation eg, "pins and needles" or numbness



## **6. Principles of managing upper limb disorders in the workplace**

In 2002 the HSE published a revision of its guidance on work related upper limb disorders. This takes a holistic approach to the issue and promotes a seven stage cycle to the prevention and management of upper limb disorders. The stages are;

- Understand the issues and commit to action
- Create the right organisational environment
- Assess the risk of ULDs in your workplace
- Reduce the risks of ULDs
- Educate and inform your workforce
- Manage any episodes of ULDs
- Carry out regular checks on programme effectiveness

Occupational health professionals can do a lot to help managers understand the importance of taking a rounded, preventative approach to the issue of upper limb disorders, rather than just responding to cases when they arise.

The details of this management approach are fully explained in the HSE guidance, 'Upper limb disorders in the workplace' HSG60(rev). Senior management commitment is essential to this approach.

## **7. Assessing and controlling the risks of upper limb disorders in the workplace**

Where a particular job may be likely to cause upper limb disorders a risk assessment should be made to identify whether risk factors are present and the likelihood of injury. HSG60(rev) contains a risk filter and risk assessment worksheets which can also be downloaded from the musculoskeletal disorders pages of the HSE website. Other risk assessment tools such as RULA (Rapid Upper Limb Assessment), and QEC (Quick Exposure Checklist), can also be accessed through the same page of the HSE web site.

Some solutions to the prevention of WRULDs include:

- improved work design
- job rotation
- training of employees
- regular breaks where work is repetitive
- improved work ergonomics
- education of managers and employees on the recognition of WRULD and early reporting of symptoms to allow prompt correction of causative factors.



## **8. Managing any episodes of upper limb disorders**

It is now recognised that early intervention is important in managing any cases of musculoskeletal disorders that may arise at work, whether the individual remains at work or has taken sick leave. In order to catch any symptoms early workers should be told what to look out for, and encouraged to report any concerns to their team leader or directly to occupational health.

A reduction in the demands of the work task may be necessary to allow recovery to progress. The general principles of managing sickness absence are given in the HSE publication HSG 249 and also on the sickness absence page of the HSE web site. Information on measures that some employers have taken to encourage an early return to work in those suffering from musculoskeletal disorders is contained in HSE Research Report 493.

Some upper limb disorders are reportable to the enforcing authority under RIDDOR but, with the exception of carpal tunnel syndrome in vibration exposed workers, these are probably uncommon in the electricity industry. These same conditions attract statutory compensation under the prescribed diseases legislation.

While it is unlikely that any of these conditions will be life-long, some conditions are difficult to treat and may take a considerable period of time to resolve, e.g. frozen shoulder. (This condition is not caused by work but will interfere with work activities.)

Common treatments for upper limb disorders include:

- rest
- support eg, splints
- anti-inflammatory drugs eg, ibuprofen
- cortisone injections
- physiotherapy
- surgery

Recovery is likely to be facilitated by adjustments to work activities such as reducing the time spent on problematic tasks, as well as modifying the tasks to reduce the force applied and the frequency of operations. Temporary redeployment may be helpful. Recovery may also be influenced by associated psychosocial factors. A risk assessment of the job should be carried if this has not already been done.

With appropriate treatment and adjustment to work activities many upper limb disorders will resolve satisfactorily. If symptoms are persistent, and interfere significantly with day to day activities, the Disability Discrimination Act 1995 may apply, requiring reasonable adjustments to work tasks, which might include permanent redeployment.



## 9. Recommendations

Employers should take a holistic approach to the prevention and management of upper limb disorders in the workplace based on the principles contained in HSE publication HSG60(rev).

Employers should have measures in place to ensure that early occupational health advice is obtained to help to minimise the impact of any cases of upper limb disorders that occur.

## 10. Summary

There is now a great deal of information available to employers and occupational health professional on the prevention and management of upper limb disorders in the workplace. The effects of this common health problem can be minimised by following current advice on good practice.

## 11. References and sources of further information

1. 'Work-related neck and upper limb musculoskeletal disorders', Buckle P and Devereux J, Research Report, European Agency for Safety and Health at Work, 1999, ISBN 92 -828-8174-1  
[www.osha.europa.eu/publications/reports/201](http://www.osha.europa.eu/publications/reports/201)
2. 'Upper limb disorders in the workplace', HSG60(rev), HSE Books 2002; ISBN 0-7176-1978-8
3. 'Managing sickness absence and return to work', HSG 249, HSE Books 2004, ISBN 0-7176- 2882-5
4. 'Work related upper limb disorders: Recognition and management.' Hutson M A, Butterworth- Heinemann, Oxford 1997, ISBN 0 75064548 2
5. Risk assessment tools for upper limb disorders  
[www.hse.gov.uk/msd/risk.htm](http://www.hse.gov.uk/msd/risk.htm)
6. Sickness absence and return to work advice  
[www.hse.gov.uk/sicknessabsence](http://www.hse.gov.uk/sicknessabsence)
7. The costs and benefits of active case management and rehabilitation for musculoskeletal disorders Research Report 493  
[www.hse.gov.uk/research/rrhtm/rr493.htm](http://www.hse.gov.uk/research/rrhtm/rr493.htm)