



DOCKS, WATERWAYS AND FISHING NATIONAL TRADE GROUP

BRIEFING ON HAND INJURIES

Terminology: repetitive strain injuries (RSI) upper limb disorders (ULD) and musculoskeletal disorders (MSD)

Many docks, waterways and fishing members find that they experience muscle or joint pain in their back or shoulder or in their fingers and wrist movements. A number of terms are used to describe these “aches and pains”, “musculoskeletal disorders”, “RSI” or upper limb disorders (ULD). Workplace strain injuries are sometimes called Work Related Upper Limb Disorders (WRULDS). This briefing will use the term RSI or ULD.

Please note that RSI and ULD are collective terms to describe “aches and pains” and not specific medical conditions. But this should not be confused with another condition called “diffuse RSI”.

This briefing mainly covers hand and wrist injuries, but these cannot of course be isolated from other parts of the body when it comes to health and safety and prevention. For example shoulders may be affected by arm or wrist movements; and knees and feet can be affected by overuse if a job involves a lot of kneeling or operating foot pedals on equipment. A holistic preventive approach to msds must be taken.

How common are upper limb disorders/RSI?

They affect hundreds of thousands of workers every year in Britain. According to the Labour Force Survey the numbers of self-reported musculoskeletal disorders for upper limbs and neck is rising and estimates that today there are about half a million cases of work-related msds affecting the neck and upper limbs across all industries. Repetitive tasks are a significant contributory factor.

What are upper limb disorders/RSI?

- They are complaints of the arm, hand, wrist and shoulder caused by undue loading of muscles, tendons and joints. They include injury to soft tissues, particularly the tendons which attach muscle to bone.
- Early warning signs of these disorders include tenderness and swelling to muscles and joints, muscle weakness and pins and needles. Some complaints involve diffuse but persistent pain in muscles and associated tissue. The sufferer may experience tenderness, but physical signs are often absent.
- Muscles in the neck, upper back and chest can also be affected. Pain may be felt both in these areas and in the hands and arms (referred pain). Aspects of work linked with an increased risk of ULDs include application of high manual force, unsuitable work rates/repetition for long spells and awkward or rigid posture.
- Not all upper limb disorders are work-related but they are often directly linked to workplace activity. Many factors may contribute to developing an injury – and a ULD developed outside work may be made worse by work.
- Individuals are unique including height, physique etc so people may react differently to particular work situations. This is why it is so important that the employer consults members about systems of work, equipment etc and carries out meaningful risk assessments with the involvement of the workers concerned.

Hand/Arm conditions

There are many different names for hand, arm and wrist conditions, including:

- Tenosynovitis (hand/wrist)
- carpal tunnel syndrome (hand/wrist)
- vibration white finger
- tendonitis (hand/wrist)
- dupuytren's contracture (hand)
- epicondylitis or 'tennis or golf elbow'
- bursitis or beat hand (elbow. hand)
- trigger finger
- frozen shoulder

More information on some common types of hand injury

Tendonitis

This is an inflammation of the tendons, for example in the wrist. Tendons are fibrous bands of tissue that connect muscle to bone. Symptoms will vary depending on the tendon affected and the cause and severity of the inflammation. Symptoms may include swelling, heat or redness, minimal bruising, loss of movement, a grating sensation in the tendon when it moves and local pain. Tendonitis is most often caused by injury or overuse. It can also be caused by a tear to the tendon. Tendonitis can be prevented by avoiding excessive use of a particular repetitive movement or studying how the movement can be better performed.

Carpal Tunnel Syndrome

This also affects hand and wrist. Your wrist contains a firm, tunnel-like structure called the carpal tunnel, which contains nerves, bones, and ligaments. The cause is not fully understood but it occurs when pressure is put on the median nerve (see diagram on front cover). Symptoms may include pain in the hand which is often worse at night, pins and needles in the thumb, forefinger, middle finger and the half of the ring finger nearest the thumb, numbness of the hand, weakened grip in the affected hand and pain in the lower forearm.

Dupuytren's Contracture

Dupuytren's Contracture is a deforming condition of the hand in which one or more fingers, usually the ring finger and little finger, contract toward the palm, often resulting in functional disability. Its causes are usually unknown, but it affects one in 6 of men over 65 (especially if there is a family history of it). It tends to be more common in people with alcohol dependency, diabetes, epilepsy and cirrhosis of the liver.

Trigger finger

This is a hand condition, a feature of which is a finger locking in a bent position. The sufferer has difficulty in extending the finger and when the finger is forcibly straightened inflammation of the fibrous sheath stops the tendon sliding smoothly back into the sheath. There is usually a bump and tenderness at this site of the obstruction. If the finger is straightened there is a cracking or snapping sound.

Source: NHS Direct Website www.nhsdirect.nhs.uk

How are the injuries caused?

- A common source is when someone grips, squeezes or presses with the palm of the hand and force is applied with arm joints at extremes of movement, particularly with a bent wrist.
- When there is flexing or rotating of the wrist or the wrist is bent fully backwards. Even apparently light work may involve prolonged tension of certain muscles and deadlines or increased work pace can put people under considerable stress leading to heightened muscle tension.
- Body size and physique vary. Jobs comfortable for a person of average size may be difficult for someone with, for example, a smaller hand span or weaker grip. There are differences in the speed and dexterity with which people can perform hand movements.
- Exposure to hand-arm vibration may also be a factor – for example when using chainsaws, drills or other power tools
- Using any kind of equipment found in docks and waterways for example cranes, forklift trucks, dumper trucks, jibs and caterpillar vehicles may all bring their own hazards.

Risk assessments must be carried out in relation to all work activities including those involving work equipment and the employer must consider how to control and preferably prevent harm to workers.

Spotting the problem – what you can do

- If a specific situation at work can be identified as the source of prolonged use, or some potential contributory factor, or an awkward posture, then it should be corrected. Often this is all that is needed to resolve the problem.
- Ergonomic interventions, such as redesigning work stations and modifying work methods, can help to prevent these problems and you can ask your employer to take action.
- The most important way to prevent work-related problems is to identify the potentially hazardous situation **before it affects you**.
- When you are looking at the risk factors of a task at work, remember that doing something **once** may not hurt, but **repetition** could lead to injury.
- Remember that the risk of upper limb disorders may be increased by particular factors or **combinations** of factors such as manual lifting, poor or awkward movements, uncomfortable positions, pace of work and vibration.

Factors to look for include:

- repetition of work tasks
- prolonged use of part of the body
- force directly applied to the soft tissues (nerves, tendons, ligaments, muscles)
- awkward postures.
- prolonged use combined with applied force - this can cause micro-trauma, resulting in inflammation and injury.
- awkward postures, poor work station and equipment design, and improper work technique can lead to muscle imbalances.
- exposure to extremes of temperature - hot and cold
- medical conditions (such as diabetes, arthritis, and pregnancy) may be relevant
- poor lighting
- handling of loads whilst seated
- slippery or uneven ground or floor surfaces
- insufficient rest break (leading to fatigue) and tight deadlines
- carrying heavy loads any distance
- excessive pushing or pulling of load
- unstable, heavy or awkward loads
- twisting and stooping the body
- inadequate space and restrictive clothing or protective equipment
- exposure to vibration
- recreational activities and hobbies outside the workplace can contribute to the development of an overuse injury

Use your rights to help prevent injury and promote recovery

Key point: Make sure all aches and pains and rsi injuries are reported and recorded

- Ensure the employer has carried out risk assessments of all workplace activities – get involved and ask for a copy of the risk assessment
- Help the employer to identify any problems – arrange an inspection
- Do a survey of workers to identify problems – and consider body mapping and workplace mapping
- Ensure the employer consults on measures to eliminate or reduce risks eg purchasing suitable and ergonomically-friendly equipment
- Make sure it is an agenda item for your health and safety committee
- Make sure the employer provides information and training on the risks of hand and arm injuries and rsi
- Help others in the workplace understand the hazards and how to tackle them
- Work with the employer on the testing of solutions and report any problems
- Work with the employer to ensure that disability, rehabilitation and sickness absence issues are handled appropriately and sensitively

Medical treatment

The emphasis must always be on prevention of injuries at work (see information about the law below). But in the event of injury members should seek advice from their GP as soon as possible. Early diagnosis and treatment are essential to help prevent future problems and the GP's advice should be taken – including if necessary desisting from work. The sooner treatment is started, the better the chance of recovery.

Everyone is different and medical advice and management of injuries will vary from person to person. Seek medical advice without delay.

Personal Injury Claims

Members who are injured at work may be entitled to claim compensation provided they can show that the injury is related to their work and that the employer was at fault. If you become aware that a member may have a possible claim then they should be referred **immediately** (if they wish) for advice from Union solicitors. A personal injury claim for a repetitive injury may not always be triggered by a particular event on a particular date and may not be straightforward, so it is even more important both to ensure that all problems are reported in writing to the employer without delay and, in the event of injury, getting legal advice. There are very strict time limits within which to bring a claim for compensation and delay will prejudice a potential claim.

Industrial Injuries Disablement Benefit (IIDB)

Depending on the circumstances, you may be able to claim IIDB for a range of industrial diseases and injuries including some hand conditions. This includes tenosynovitis, beat hand, and cramp of the hand or forearm due to repetitive movements. For advice about claiming benefits please contact your Regional Industrial Organiser.

Health and Safety Law

Generally the employer should:

- Consult the workforce
- Identify the problems ie the hazards and risks
- Establish the extent of the problem, eg workplace surveys, monitoring accident records etc
- Take action if necessary
- Provide health and safety training
- Identify high-risk groups such as young workers, older workers, pregnant workers
- Assess provisions for disabled workers
- Review risk assessments
- Generate and evaluate solutions in consultation with the workforce
- Select appropriate action
- Provide information about hazards
- Provide training
- Implement findings of risk assessments
- Monitor and review effectiveness of actions taken eg as a result of a risk assessment

Some health and safety law relevant to hand injuries

Section 2 of the Health and Safety at Work etc Act 1974 (HSW Act) places a duty on employers to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all their employees.

Section 6 places a duty on manufacturers, designers, suppliers and importers of articles for use at work to ensure, so far as is reasonably practicable, that the article is so designed and constructed as to be safe and without risks to health.

Under section 7 employees have to take reasonable care for their own health and safety and that of others who may be affected by what they do (or fail to do); they also have to co-operate with their employer so far as is necessary to enable the employer to comply with legal duties.

The HSW Act deals with general duties and contains no specific requirements on the prevention of ULD/RSIs. However, relevant aspects include the provision and maintenance of safe plant, machinery and systems of work and provision of information, instruction and training.

Safety Representatives and Safety Committees Regulations 1977

These confer a wide range of rights and functions on union-elected safety representatives. These include rights to information, consultation, representation, to carry out inspections, investigate accidents and dangerous occurrences, receive information from inspectors, and paid time off to carry out their functions and for training.

Management of Health and Safety at Work Regulations 1999 include requirements for employers to:

- assess risks
- make arrangements for effective planning, organisation, control, monitoring and review of preventive and protective measures
- appoint competent people to assist the employer in complying with health and safety law
- co-operate and co-ordinate health and safety actions where the activities of different employers interact
- provide appropriate health surveillance, information and training

Provision and Use of Work Equipment Regulations 1992 place duties on employers concerning the use of work equipment. The risk assessment carried out under the Management Regulations will help employers when selecting work equipment and assessing its suitability.

Health and Safety (Display Screen Equipment) Regulations 1992 are directed mainly at the protection of 'users', ie employees who habitually use display screen equipment as a significant part of their normal work. Employers have duties to:

- assess and reduce risks
- make sure new workstations meet minimum requirements
- provide breaks or changes of activity, information and training

Manual Handling Operations Regulations 1992 require the avoidance or reduction of risk where the manual handling of loads involves a risk of injury.

Workplace (Health, Safety and Welfare) Regulations 1992 have a range of workplace requirements including on lighting, workspace, workstation arrangements, indoor temperature, seating, drinking water, sanitary and washing facilities, storage of clothing, floors, and facilities for rest and eating food.

Health and Safety (Miscellaneous Amendments) Regulations 2002 These amend various earlier regulations. They place duties on employers among other things to ensure that doors, passageways, stairs, lavatories and workstations are suitable arranged to take account of disabled workers' needs. They must also, when providing PPE, take account of the health of the people wearing it and, when considering the risks of manual handling operations, take account of the physical suitability of the employee to carry out the operations.

Control of Vibration at Work Regulations 2005

These came into force on 6 July 2005. They require employers to do a number of things in relation to vibration including assessing vibration risk to employees. They set exposure action values and limit values and require the employer to take steps to control exposure, provide information and training for employees about vibration risks, consult workers, keep a record of the risk assessment, keep health records for employees under health surveillance.

Supply of Machinery (Safety) Regulations 1992 apply to the supply of new machinery which will need to meet relevant essential health and safety requirements.

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995

These require employers to report certain diseases and injuries to the HSE. The list is wide ranging, but there are some reportable occupational diseases relevant to hand and arm injuries including:

Cramp of the hand or forearm due to repetitive movements

Beat elbow – associated with physically demanding work causing severe or prolonged friction or pressure at or about the elbow

Carpal Tunnel Syndrome – associated with work involving the use of hand-held vibrating tools

Traumatic inflammation of the tendons of the hand or forearm or of the associated tendon sheaths – arising from physically demanding work, frequent or repeated movements.

Hand-arm vibration syndrome – associated with a range of activities and tools

Disability Discrimination Act 1995 (DDA)

Disabled employees are protected by the DDA. This means that employers have to make reasonable adjustments to their working conditions or arrangements to ensure that disabled people are not treated less favourably than other employees. For more information about how this may apply please seek advice from your Regional Industrial Organiser.

More information

T&G Health and Safety Unit, Central Office. Contact Susan Murray 0207 611 2596 or email smurray@tgwu.org.uk

T&G leaflet: Do you suffer from aches and pains in silence?

T&G Safety Rep's Handbook 2004

Available from your Regional Office

TUC information available from their website www.tuc.org.uk on health and safety webpages includes:

Spotting the Risks of RSI

RSI – The Basics

TUC Worksmart pages on RSI – go to www.worksmart.org.uk then to “health”

Hazards website Factsheets on Body Mapping and Workplace Mapping - www.hazards.org

Labour Research Department: Pain at Work. A Guide to Musculoskeletal Disorders

HSE website www.hse.gov.uk/msd - has links to free leaflets and lots of other information

www.hse.gov.uk/docks - also has links to free leaflets

www.hse.gov.uk/vibration - also has links to free leaflets and cards

HSE Guidance: Upper Limb Disorders in the workplace. HSG 60 £9.50 from HSE Books
Telephone 01787 881165

HSE leaflet: Working together to prevent sickness absence becoming job loss. Copies available from Central Office or can be downloaded from www.hse.gov.uk/pubns/web02.pdf

A Guide to Industrial Injuries Disablement Benefits. Department for Work and Pensions leaflet DB1. Free

NHS Direct www.nhsdirect.nhs.uk Huge range of information on health issues

Important: your employer has a legal duty to prevent employees being injured at work

RSI can lead to permanent disabilities. The risk of injury must be prevented at an early stage and steps must be taken by the employer to avoid them occurring. Docks, waterways and fishing members can use health & safety law and agreed procedures to help prevent injury.