

## Preventing Musculoskeletal Disorders (MSDs)

### What are MSDs?

The term MSD covers any injury, damage or disorder of the joints or other issues - whether this occurs in neck shoulders and arms (upper limbs), back, or hips knees and ankles and feet (lower limbs).

The HSE estimate 11.6 million working days a year are lost to work-related MSDs. The JIB is concerned about the incidence of MSDs amongst electricians.

### MSDs and electricians

Examples of situations where electricians can get hurt include:

- Carrying out repetitive work with their hands such as stripping cables
- Drilling into walls
- Working in awkward positions such as kneeling (e.g. when fitting cables around skirting boards)
- Pulling heavy power cables which may get caught on corners – a hard tug can cause neck or back injuries
- Lifting heavy equipment

Preventing these injuries requires a range of interventions including ensuring that the worker is able to rotate tasks, use kneepads or other protection, be provided with suitable equipment to reduce or avoid manual handling such as using motorised or mechanical cable pulling equipment or lifting aids. Health and safety training should be provided, in addition to providing suitable and regularly maintained equipment.

### The Health and Safety Executive's (HSE) key messages about MSDs are:

- *you can do things to prevent or minimise MSDs*
- *the prevention measures are cost effective*
- *you cannot prevent all MSDs, so early reporting of symptoms, proper treatment and suitable rehabilitation is essential.*

But first of all it is necessary to find out what is going on!

One method which is increasingly being used by trade unions, health sector and other sections of industry is participative, visual research known as body mapping and workplace mapping.

Workplace mapping is a participative visual data gathering and reporting technique that workers can use to conduct their own "risk assessments" and collect data about what is actually happening in the workplace. It is "do-it-yourself" research for workers.

## Why use mapping?

Mapping is a powerful research tool as it:

- Encourages worker participation in improving health safety.
- Raises awareness of health and safety.

The HSE, trade unions and the International Labour Office have developed various resources, mapping tools and guidance. For example the HSE developed slips and trips and body mapping leaflets and the ILO a publication called Barefoot Research. Unite has adapted the HSE body mapping tool to carry out online surveying of members in relation to MSDs.

## Workplace mapping principles

There are two types of mapping research tools which, when linked, can give a total picture of the effects that the work environment can have on our lives. These are body mapping and risk mapping.

Mapping is about getting people to discuss their workplace collectively – how it affects them and how to improve it – and provide the basis for action by the union or further research.

Getting together to discuss how their job is affecting them gives workers a chance to see if a problem is really a work problem. If one person has an ache, it's only an ache. But if other workers have it too, it may mean that there is a health and safety problem at work which needs to be solved.

## Body mapping

Body mapping is a tool for getting workers together to discuss how their job is affecting their health. It has been largely used for identifying musculoskeletal problems and ergonomic hazards but it is equally effective in documenting other health problems such as stress.

The effects of the working environment on our health are not always easy to work out. An inspection may reveal problems in the workplace but it may not reveal how work might be harming our bodies. Body Mapping is a way of overcoming this and identifying common patterns of health problems amongst workers.

The body map is a chart showing the front and back view of a body. Using coloured pens or stickers, workers doing similar tasks on the same shift are encouraged to mark on the chart where they suffer pain or injury while they are working.

## Hazard mapping

Hazard mapping is a collective effort and is designed to gather information about hazards. Members can make a drawing of their workplace and mark on it the hazards that are present, using coloured pens or stickers.

Hazard mapping can help to identify workplace hazards such as stress, chemicals, physical hazards, work design and biological hazards. It helps members to visualise their workplace and the hazards that exist. It also provides documentation that can be presented to an employer, inspector or health and safety committee.

Hazard maps can even be drawn retrospectively. So, using workers' collective memory, a map can be drawn of the workplace or department as it existed years before, and links between the workplace and health problems that have a latency period, such as cancer, may be identified.

## **Suggested action**

Checking out the job is part of any health and safety preparation before starting work.

Risk assessments should cover prevention of MSDs - reducing or eliminating manual handling and repetitive tasks.

Ongoing health and safety audits and inspections are central to ensuring that the workplace is kept safe and healthy.

It does not have to be formal, but comparing notes and sketches can often result in developing better and safer working methods.

Report all concerns to your manager or supervisor to enable action to be taken to prevent MSDs so that you are able to work safely.

For more information about workers' participative research and on preventing MSDs, please see:

ILO – Barefoot Research

<http://www.ilo.org/public/english/protection/ses/info/publ/barefoot.htm>

HSE webpages on managing construction health risks

<http://www.hse.gov.uk/construction/healthrisks/>

HSE webpages on preventing musculoskeletal disorders

<http://www.hse.gov.uk/msd/msds.htm>

HSENI/HSE Body mapping tool

[http://www.hseni.gov.uk/body\\_mapping\\_tool.pdf](http://www.hseni.gov.uk/body_mapping_tool.pdf)

Unite resources

<http://www.unitetheunion.org/unite-at-work/informationresources/healthsafetyresources/safetyrepresentativesinspectionsandorganising/>