

**Health
& Safety**

Preventing Manual Handling Injuries

A Guide for Usdaw Health and Safety Reps



*U***s**daw
*Union of Shop, Distributive
and Allied Workers*



Preventing Manual Handling Injuries

Manual handling is the most common cause of accidents and ill-health in the workplace. According to Government figures, 1.2 million people suffer from some form of work-related musculo-skeletal disorder (back pain, RSI, etc). Just over half of these injuries are caused by manual handling.

Manual handling risks are even more important for Usdaw members. In sectors such as retail and distribution, manual handling accounts for an even higher proportion of injuries because of the lifting and carrying involved.

This guide explains the legal duties on manual handling and gives advice to Usdaw Health and Safety Reps on how to identify manual handling risks.

Manual Handling Operation Regulations

Employers have strict legal duties to prevent injury from manual handling.

Under the Manual Handling Operations Regulations the employer must:

- Avoid the need for workers to do any manual handling task which involves a risk of injury.
- Where this is not possible, they must assess the task, taking into account the range of risk factors specified in the Regulations.
- They must use the assessment to reduce the risk to the lowest reasonably practicable level.
- They must provide workers with 'general indications' of the risk and, where possible, specific information on the weight of loads and the heaviest side of a load with an off-centred centre of gravity.

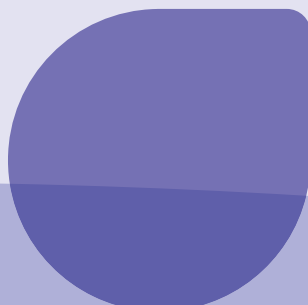
Employees also have a duty under the Regulations to make full and proper use of any system of work provided by the employer.

What causes the risk?

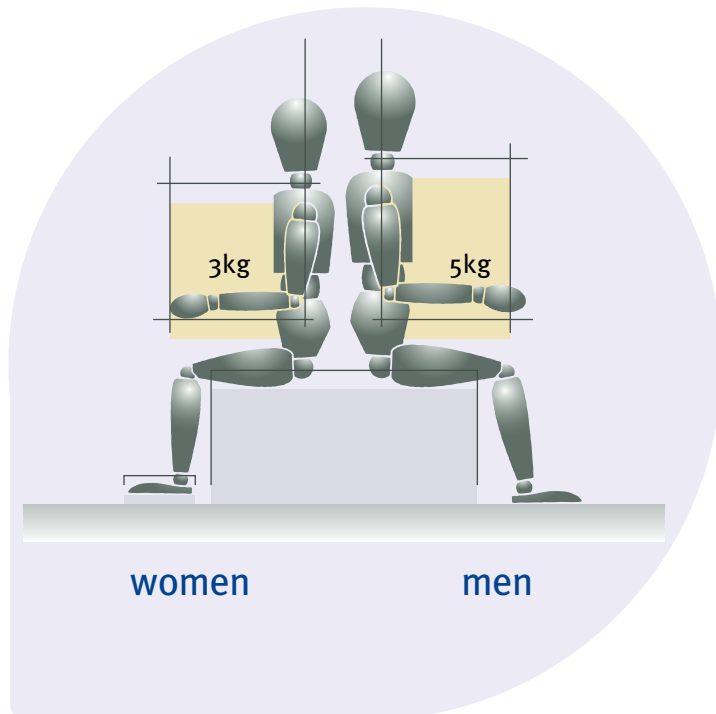
Lifting heavy weights is not the only cause of manual handling injuries. Other factors like repetitive lifting, awkward postures, unstable loads, etc, can all cause problems.

That is why the Regulations do not specify a maximum weight. Instead they require the employer to adopt an ergonomic approach. This involves assessing a range of risk factors. In the Regulations the risk factors are divided into four main areas – the task, the load, the environment and individual capacity. In **Appendix Two** there is a checklist which covers all the risk factors included in the Regulations.

Although the Regulations do not contain any reference to maximum weights, the Health and Safety Executive (HSE) has published guidance to the Regulations. In the guidance they give advice on the sorts of weights that are likely to cause injury. The guidance stresses that those are not 'safe limits'. People may still be injured lifting lighter loads if other risk factors are present. The guidance figures show when an assessment is likely to be needed. They assume that the worker is lifting easily held, compact loads in ideal conditions.



Handling while seated



Reducing the risk/eliminating the risk

The best solution is to remove the need for the particular manual handling task that causes the injury. This could mean replacing a risky handling task with a safer one. For example, making work surfaces level may make it possible to slide loads rather than lift them.

If automation or mechanisation is introduced, it can create new risks for workers who have to feed products into the machine or pack products as they come off the machine. These tasks should also be assessed. Training in the correct use of mechanical aids will be needed.

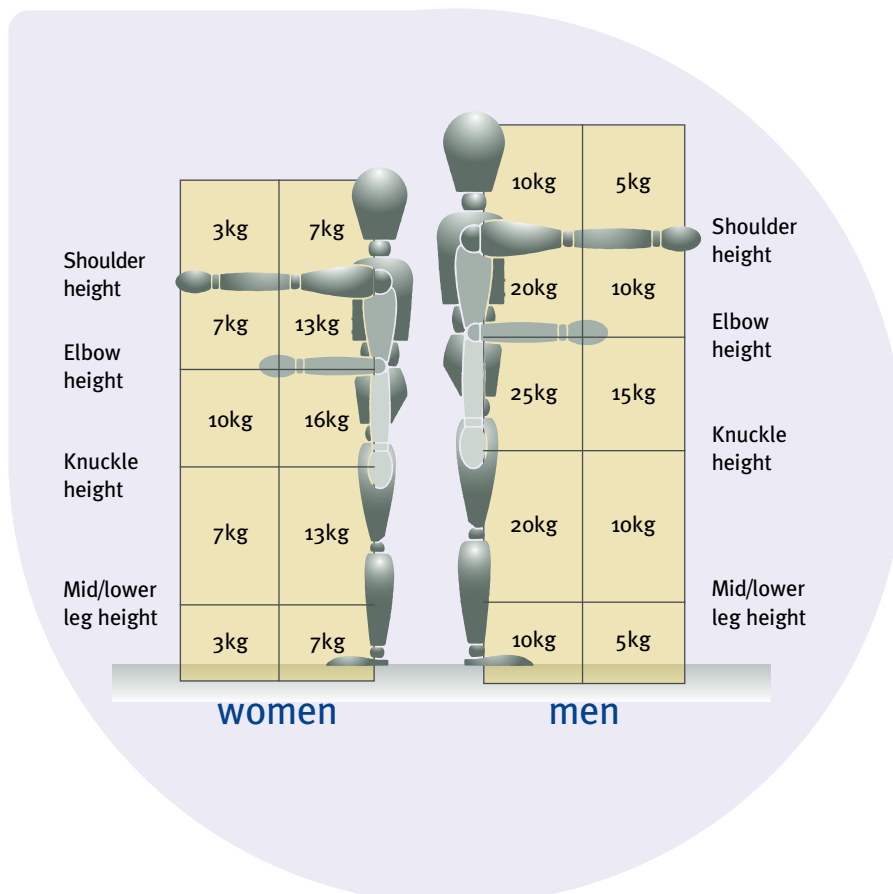
Assessing the risk

Assessments must be systematic. They can be done by in-house staff or by outside experts – as long as they are familiar with the work being done and with the requirements of the Regulations. They must consult with the workers doing the job and with their union Health and Safety Reps.

The HSE has developed two tools – the Manual Handling Assessment Chart (MAC) and the Assessment of Repetitive Tasks (ART) – that can be used for some common handling tasks (see Appendix Two for more details).

Some members will do manual handling tasks away from the workplace – for example delivery drivers, funeral undertakers. The employer still has a duty to do what they can to eliminate or reduce the risks. Their assessment should be based on the foreseeable risks involved. They also have a shared duty with the employer in control of the premises visited to co-operate to reduce the risks.

Lifting and lowering



Handling while seated

The weight guidelines show that seated workers face particular risks because they cannot use the stronger leg muscles to support the load. This does not mean that sitting is not allowed in jobs like checkout work.

Standing in one place for long periods can itself put strain on the legs and the back. Other Regulations require employers to provide a suitable chair where work can be done sitting down.

Pushing and pulling loads

The guidance also contains some advice on pushing and pulling of loads such as roll-cages and trolleys. Guidance figures are given for the forces that might cause injury. For starting and stopping loads, forces in excess of 20 kilograms force for men and 15 kilograms force for women are likely to cause injury. For keeping the load moving at a steady pace the figures are 10 kilograms force for men and seven kilograms force for women. As a rough guide at least eight kilograms of force are needed to push a 400kg trolley over a flat surface. If the floor is sloped or uneven or the wheels are faulty the force required rises substantially. One HSE study found that a roll-cage loaded with five layers of two-litre cola bottles weighed around 700kg and required a force of 31kg to get it moving – well in excess of guideline figures.

Using ladders or steps

The Regulations and guidance make little reference to handling loads while on ladders, steps, kick-stools, etc. However, they do specify the importance of avoiding twisting or stretching and having a stable work platform. All of these factors will be compromised when working on steps or ladders.

Reducing the risk

The assessment is only the means to an end. To reduce the risk the employer must make sure that the safer system of work is adopted. Solutions must be realistic and practical.

For example, if a load requires two or more people to handle it safely, the employer must make sure that there are enough workers available to make this possible.

Gender and handling injuries

It is often wrongly assumed that jobs that are traditionally done by women are 'lighter'. In many workplaces it is left to the men to do heavy lifting jobs.

In fact, women are as much at risk as men from manual handling injuries.

It is generally true that the average strength of women is about 60% of the average strength of men. However, there is such a wide overlap between the sexes that there is no point in trying to identify tasks which only men should do. If a load is too heavy for a fit woman to handle, it will be equally dangerous for a large number of men.

There will be certain individuals who are not suited to particular handling tasks. Also, there will be some jobs which require particular fitness, height or strength. But, in general, employers should aim to design the work so that most jobs can be done by most people.

Training and information

Workers are required by law to follow the safe working procedures the employer introduces. This means they need to be trained on the nature of the risk and the procedure to follow.

The training should be specific to the job they do. There is no point showing people how to lift a square box from the floor by bending the knees, keeping the back straight, etc, if in practice this bears no resemblance to the task they have to do and the loads they have to handle.



Using Health and Safety Reps' powers

Usdaw Health and Safety Reps have a vital role to play in making sure members are not exposed to risk.

They can use their powers to investigate potential hazards and to talk to the members to identify handling risks that the employer may not have spotted.

They can use their right of access to information to get copies of handling assessments to check that they are true to what happens in practice.

They can use their inspection rights to make sure that the safe procedures devised by the employer are being followed properly in their workplace.

When they do find a problem of any kind, they can use the health and safety committee or the grievance procedure to get the problem resolved.

Health and safety is one of the main reasons people give for joining and staying in the Union. Health and Safety Reps should work with other activists to make sure that all potential members know what Usdaw can do to protect their health and safety.

In particular they should publicise to members and non-members:

- Examples where the Union has been successful in reducing manual handling risks.
- Examples where the Union has won compensation for members who suffered manual handling injuries.

It is also important to point out the benefit to the employer.

Manual handling injuries often involve a lot of time off work and are very costly. Improving the way the job is done increases efficiency as well as reducing risk.

Appendix One contains some suggestions on how Usdaw Health and Safety Reps can identify where there is a manual handling problem.

Appendix Two contains a checklist that Usdaw Health and Safety Reps can use to make sure that everything possible is being done to control the risk.

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Appendix One

Finding out if there is a problem

Often jobs which involve intensive manual handling are obvious. Shelf-filling in shops, picking in a warehouse, emptying sacks of ingredients into a process vessel in a factory are all likely to involve a considerable amount of lifting and carrying.

However, it can be difficult to identify the manual handling tasks that involve a risk of injury.

Because of individual differences, sometimes people doing the same task may end up with aches and pains in different parts of the body. For example, a taller worker may suffer pain in the lower back while shorter workers may have more problems with their shoulders and arms.

Often workers are frightened to report symptoms to their managers because of fears over job security. This can be a particularly serious problem. If the worker tries to carry on and ignore these symptoms, they could end up with a permanent disability.

Individuals may not realise that their aches and pains are linked to the job. They may think it is only themselves who are suffering because they are getting older or are unfit. They may not realise that workmates are suffering similar problems.

To overcome these difficulties, it is important that Usdaw Health and Safety Reps adopt a methodical approach to identifying manual handling problems.

In the past, some Usdaw Health and Safety Reps have used very simple questionnaires to identify risks. In one supermarket, for example, the reps were concerned about the introduction of a new checkout design. All the checkout operators were sent a questionnaire asking for details of their height, age, hours worked, whether they had any aches or pains in their neck, shoulder, arms, etc; and if they had consulted their GP about it. From the results, they were able to show that shorter workers were reporting extremely high levels of shoulder and neck pain which was due to the amount of stretching to reach produce involved in the new design.

To help Usdaw Health and Safety Reps investigate possible manual handling risks, a technique called 'body mapping' has been devised.

Body mapping is a very simple technique to get people thinking about what bit hurts when they are working.

The idea of body mapping is to get members to mark on the chart where they feel aches or pains when they are doing their job – either using felt pens or using paper stickers.

If you are doing a body map exercise focused on manual handling, you could ask them to use different coloured pens (or different coloured stickers) for different problems, for example:

- Blue for cuts and bruises.
- Red for long-term aches and pains.
- Green for immediate pain associated with a particular task.

You could do the exercise by photocopying these charts and giving the copies to individual members to fill in themselves. It is even better if you can get members together in a group to talk about their experiences and mark their own aches and pains on a common chart. To do this you may want to enlarge the chart on a photocopier.

If you have any difficulty photocopying or enlarging charts, contact the Usdaw Health and Safety Officer at Central Office for assistance.

Whichever way you do it, you need to make sure that most of the workers are involved in the exercise. If you do get them all involved and you find, for example, high levels of complaints about backache or neckache, linked to a particular task, it is difficult for the employer to dismiss the results.

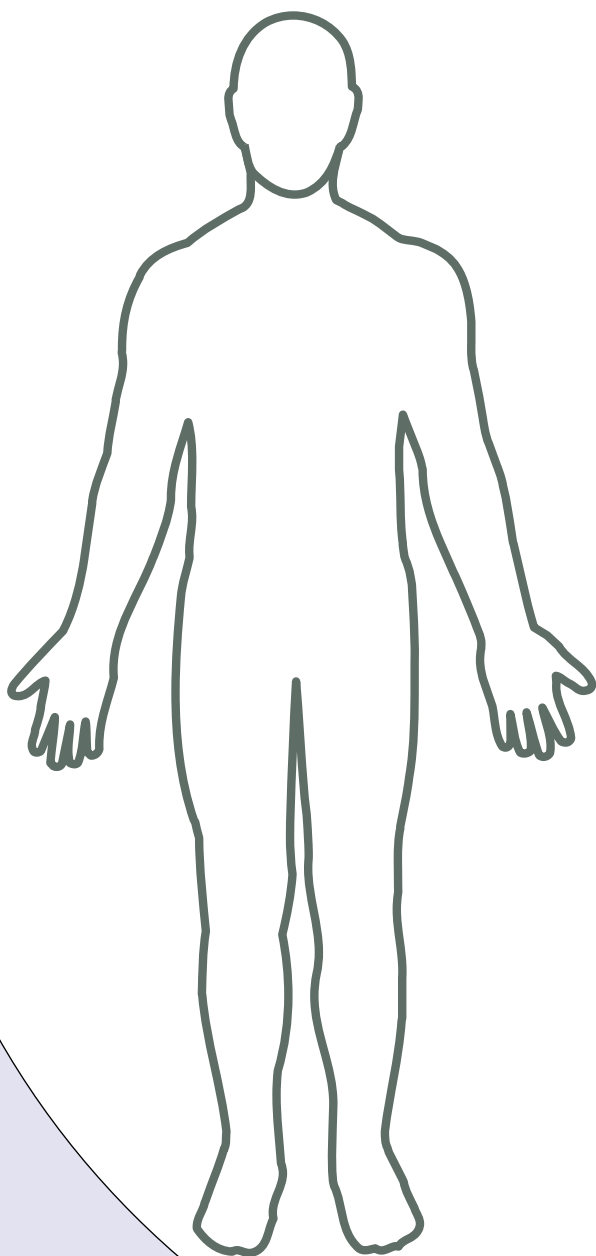
If you come across individual members who are suffering severe pain during your investigation, encourage them to phone FirstCall Usdaw, the Union's Free Accident Claim Line on 0800 055 6333. Claims for musculo-skeletal disorders from manual handling are often difficult. But if the member is suffering chronic pain as a result of their injury, compensation from their employer's insurance can be a big help.

If a member does pursue a compensation claim, evidence from the Union that the employer should have been aware of the problem can be very helpful. Safety committee minutes, hazard reports or written results of surveys or body mapping exercises will be very useful.

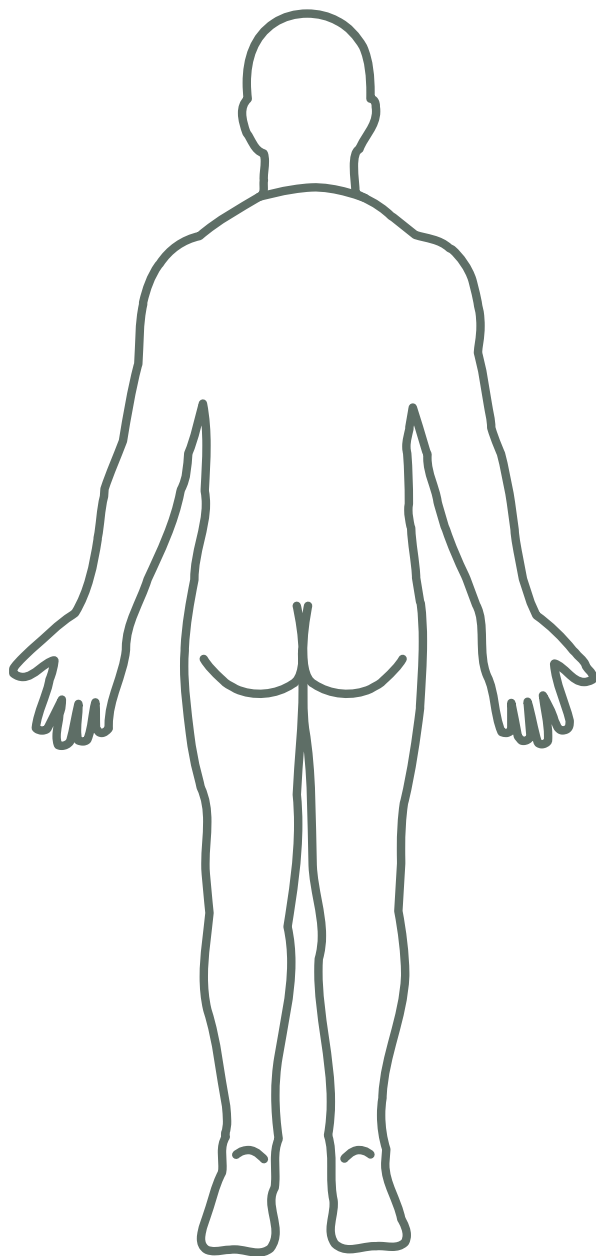
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Front



Back



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Appendix Two

Helping to prevent injuries

If Usdaw Health and Safety Reps identify a problem, either through some kind of survey or through general observation of the workplace, they can use their legal functions to raise it with management and get it resolved.

The first step is to check that the employer has done a manual handling assessment for the job involved. If there is none, use the health and safety procedures to demand one.

If they have, get a copy of the written assessment.

- Does it accurately portray the way the work is done?
- Were members or Usdaw Health and Safety Reps consulted when it was being done?
- Have all the important risk factors been considered? (The checklist opposite lists all the risk factors that should be considered.)

- Do the safe handling procedures work in practice? If not, why not?
- Have members been given appropriate training?
- Does the employer have a system to monitor and review the procedures?

Checklists on Lifting and Carrying and Pushing/Pulling are published by the HSE in its guidance to the Manual Handling Operations Regulations. Employers are meant to use them where there is a risk of injury, either because weights above the numerical guidelines are being used or because other risk factors are present.

Udaw Health and Safety Reps can use the HSE checklists to look at the employer's manual handling assessments and consider whether they are adequate.

For some lifting, carrying and team handling jobs, the Manual Handling Assessments Chart (MAC) tool may be helpful. It is designed to make it easier to identify the level of risk associated with the job and uses a numerical and colour coded scoring system to identify important risk factors. Copies can be downloaded from the HSE website www.hse.gov.uk/msd/mac/index.htm

The HSE has also developed the Assessment of Repetitive Tasks (ART) tool for situations such as assembly line work where there is a lot of repetitive lifting of lighter loads. More information and copies of the ART tool can be found at www.hse.gov.uk/msd/uld/art/index.htm

Please contact the Health and Safety Section in the Legal Department at Usdaw's Central Office for help in using the MAC or ART tools, email healthandsafety@usdaw.org.uk



Manual Handling of Loads Assessment Checklists

Lifting and Carrying Checklist Section A – Preliminary

Job description _____

Factors beyond the limits of the guidelines? _____

Is an assessment needed? ☐ Yes ☐ No

(ie is there a potential for injury, and are the factors beyond the limits of the guidelines?)

If 'Yes' continue. If 'No' the assessment need go no further.

Operations covered by this assessment (detailed description): _____

Locations: _____

Personnel involved: _____

Date of assessment: _____

Diagrams (other information)

Section B – See over for detailed analysis

Section C – Overall assessment of the risk of injury?

☐ Low

☐ Med

☐ High

Remedial steps that should be taken, in order of priority:

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

Date by which action should be taken: _____

Date for re-assessment: _____

Assessor's name: _____

Signature: _____



Section B – Lifting and Carrying – More detailed assessment, where necessary

Questions to consider

If Yes, tick appropriate level of risk

The tasks – do they involve...

Holding loads away from trunk?

☐ Low

☐ Med

☐ High

Twisting?

☐ Low

☐ Med

☐ High

Stooping?

☐ Low

☐ Med

☐ High

Reaching upwards?

☐ Low

☐ Med

☐ High

Large vertical movement?

☐ Low

☐ Med

☐ High

Long carrying distances?

☐ Low

☐ Med

☐ High

Strenuous pushing or pulling?

☐ Low

☐ Med

☐ High

Unpredictable movement of loads?

☐ Low

☐ Med

☐ High

Repetitive handling?

☐ Low

☐ Med

☐ High

Insufficient rest or recovery?

☐ Low

☐ Med

☐ High

A work rate imposed by a process?

☐ Low

☐ Med

☐ High

The loads – are they...

Heavy?

☐ Low

☐ Med

☐ High

Bulky/unwieldy?

☐ Low

☐ Med

☐ High

Difficult to grasp?

☐ Low

☐ Med

☐ High

Unstable/unpredictable?

☐ Low

☐ Med

☐ High

Intrinsically harmful (for example, sharp/hot)?

☐ Low

☐ Med

☐ High

The working environment – are there...

Constraints on posture?

☐ Low

☐ Med

☐ High

Poor floors?

☐ Low

☐ Med

☐ High

Variations in levels?

☐ Low

☐ Med

☐ High

Hot/cold/humid conditions?

☐ Low

☐ Med

☐ High

Strong air movements?

☐ Low

☐ Med

☐ High

Poor lighting conditions?

☐ Low

☐ Med

☐ High

Individual capability – does the job...

Require unusual capability?

☐ Low

☐ Med

☐ High

Hazard those with a health problem
or a physical or learning difficulty?

☐ Low

☐ Med

☐ High

Hazard those who are pregnant?

☐ Low

☐ Med

☐ High

Call for special information/training?

☐ Low

☐ Med

☐ High

Other factors

Is movement or posture hindered by clothing
or personal protective equipment?

☐ Yes

☐ No



Section B – Lifting and Carrying – More detailed assessment, where necessary

Questions to consider

Protective clothing

Is movement or posture hindered by clothing or personal protective equipment?

☐ Yes

☐ No

Is there an absence of the correct/suitable personal protective equipment being worn?

☐ Yes

☐ No

Work organisation (psychosocial factors)

Do workers feel there has been a lack of consideration given to the planning and scheduling of tasks/rest breaks?

☐ Yes

☐ No

Do workers feel that there is poor communication between managers and employees (for example, not involved in risk assessments or decisions on changes in workstation design)?

☐ Yes

☐ No

Are there sudden changes in workload or seasonal changes in volume without mechanisms for dealing with the change?

☐ Yes

☐ No

Do workers feel they have not been given enough training and information to carry out the task successfully?

☐ Yes

☐ No


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Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken).

Possible remedial action (for example, changes that need to be made to task, load, working environment etc). Who needs to be involved in implementing the changes?

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Pushing and Pulling Checklist

Section A – Pushing and Pulling – More detailed assessment, where necessary

Questions to consider

If Yes, tick appropriate level of risk

The tasks – do they involve...

High initial forces to get the load moving?

☐ Low ☐ Med ☐ High

High forces to keep the load in motion?

☐ Low ☐ Med ☐ High

Sudden movements to start, stop or manoeuvre the load?

☐ Low ☐ Med ☐ High

Twisting/manoeuvring the load into position or around obstacles?

☐ Low ☐ Med ☐ High

One-handed operations?

☐ Low ☐ Med ☐ High

The hands below the waist or above shoulder height?

☐ Low ☐ Med ☐ High

Movement at high speed?

☐ Low ☐ Med ☐ High

Movement over long distances?

☐ Low ☐ Med ☐ High

Repetitive pushing/pulling?

☐ Low ☐ Med ☐ High

The load or object to be moved...

Does it lack good handholds?

☐ Low ☐ Med ☐ High

Is it unstable/unpredictable?

☐ Low ☐ Med ☐ High

Is vision over/around it restricted?

☐ Low ☐ Med ☐ High

If on wheels/castors – are they...

Unsuitable for the type of load?

☐ Low ☐ Med ☐ High

Unsuitable for the floor surface/work environment?

☐ Low ☐ Med ☐ High

Difficult to steer?

☐ Low ☐ Med ☐ High

Easily damaged or defective?

☐ Low ☐ Med ☐ High

Without brakes or difficult to stop?

☐ Low ☐ Med ☐ High

With brakes, but the brakes are poor/ineffective?

☐ Low ☐ Med ☐ High

Without a planned inspection and maintenance regime based on a frequency that keeps them in working order?

☐ Low ☐ Med ☐ High



Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken).

Possible remedial action (for example, changes that need to be made to task, load, working environment etc). Who needs to be involved in implementing the changes?

Section B – Pushing and Pulling – More detailed assessment, where necessary

Questions to consider

If Yes, tick appropriate level of risk

Consider the working environment – are there...

Constraints on body posture/positioning?

☐

Low

☐

Med

☐

High

Confined spaces/narrow doorways?

☐

Low

☐

Med

☐

High

Surfaces or edges to cause cuts/abrasions/burns to hands or body?

☐

Low

☐

Med

☐

High

Rutted/damaged/slippery floors?

☐

Low

☐

Med

☐

High

Ramps/slopes/uneven surfaces?

☐

Low

☐

Med

☐

High

Trapping or tripping hazards?

☐

Low

☐

Med

☐

High

Poor lighting conditions?

☐

Low

☐

Med

☐

High

Hot/cold/humid conditions?

☐

Low

☐

Med

☐

High

Strong air movements?

☐

Low

☐

Med

☐

High

Consider individual capability – does the job...

Require unusual capability?

☐

Low

☐

Med

☐

High

Hazard those with a health problem or physical or learning difficulty?

☐

Low

☐

Med

☐

High

Hazard those who are pregnant?

☐

Low

☐

Med

☐

High

Call for special information/training?

☐

Low

☐

Med

☐

High

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Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken)

Possible remedial action (for example, changes that need to be made to task, load, working environment etc). Who needs to be involved in implementing the changes?





Section C – Pushing and Pulling – More detailed assessment, where necessary

Questions to consider

Equipment

Is movement or posture hindered by clothing or personal protective equipment?

☐ Yes

☐ No

Is there an absence of the correct/suitable personal protective equipment being worn?

☐ Yes

☐ No

Are trolleys/carts/floor surfaces poorly maintained/cleaned/repaired?

☐ Yes

☐ No

Is there a lack of a regular maintenance procedure for the equipment?

☐ Yes

☐ No

Work organisation

Do workers feel there has been a lack of consideration given to the planning and scheduling of tasks/rest breaks?

☐ Yes

☐ No

Do workers feel that there is poor communication between users of equipment and others (for example, managers, purchasers etc)?

☐ Yes

☐ No

Are there sudden changes in workload, or seasonal changes in volume without mechanisms for dealing with the change?

☐ Yes

☐ No

Do workers feel they have not been given enough training and information to carry out the task successfully?

☐ Yes

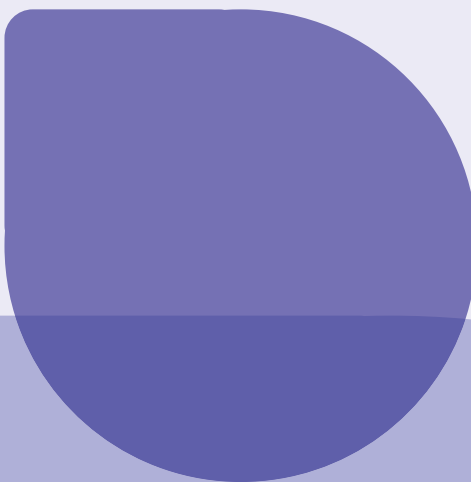
☐ No


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Problems occurring from the task (make rough notes in this column in preparation for the possible remedial action to be taken).

Possible remedial action (for example, changes that need to be made to task, load, working environment etc). Who needs to be involved in implementing the changes?

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