

# Moving and Handling of Objects Safety Guidance Note

Lead Directorate and Service:	Corporate Resources - Human Resources, Safety Services.
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## 1. Background

This safety guidance note covers the general principles associated with the manual handling of objects and links with the safety guidance document on the prevention and management of musculoskeletal disorders.

#### 2. Foreword

In accordance with the councils' corporate safety policy, the council is committed to pursuing continual improvements in health and safety. This safety guidance document supports this commitment and forms part of the councils' health and safety management system.

## 3. Implementation

Directorates are responsible for the implementation of this safety guidance document, and communication of its content as appropriate.

This safety guidance document is available on the safety services intranet page and, where employees do not have access to the council's intranet, via their line manager/headteacher.

The council relies on the co-operation of all employees, and trade unions for the successful implementation of this safety guidance document.

A review of this safety guidance document will be undertaken two years after its implementation, and where significant changes in legislation or working practices deem this appropriate.

#### 4. Roles and Responsibilities

#### 4.1 Directors and Heads of Service

Directors and heads of services are ultimately responsible and accountable to the chief executive for ensuring this safety guidance document is issued to their management team.

## 4.2 Managers and Headteachers

Managers and headteachers are responsible for achieving the objectives of this safety guidance document where relevant to their area of service delivery and are responsible for ensuring that:

- The information contained within this safety guidance document is implemented and complied with;
- Risk assessments and subsequent manual handling assessments are completed taking into consideration the arrangements section of this document;
- Control measures (safe systems of work) are introduced to reduce any potential risks to a reasonable level;
- Relevant information, instruction and training is provided to staff to enable them to undertake their job safely and without risk;
- There is adequate provision of, and suitable maintenance arrangements for, the equipment required for the moving and handling of objects.

## 4.3 Employees

Employees must ensure they carry out assigned tasks and duties in accordance with information, instruction, training and agreed safe systems of work. Specifically they must ensure that:

- This safety guidance document is complied with;
- They participate in the completion and review of risk assessments;
- They cooperate to enable their manager/headteacher to formulate and implement effective management systems;
- They undertake training in techniques and equipment available to support the moving and handling of objects;
- They report defective equipment;
- They inform management where they have concerns about an activity and the need to re-assess ability, equipment or condition;
- They notify manager of changes to their own health;
- Their own health and safety and that of others are not put at risk by their actions.

#### 4.4 Safety Services

The primary function of safety services is to support the council and its employees by providing professional, authoritative, impartial advice on all aspects of health, safety and wellbeing. Where managers/headteachers require further assistance, safety services will advise on achieving compliance with this safety guidance document.

## 4.5 Occupational Health

Occupational health will support this policy and procedure by providing managers, headteachers and employees with guidance on work related health issues.

Occupational health facilitates a range of services, including access to fast track physiotherapy services to assist in the management of musculoskeletal disorders, accessible through management referral. Referrals can be made through the occupational health's access point, via the council's intranet site.

## 5. What is meant by moving & handling of objects?

The Manual Handling Operations Regulations apply to the moving and handling of loads, i.e. by human effort, as opposed to mechanical handling.

Moving and handling include; both transporting a load and supporting a load in a static posture. The load may be moved or supported by the hands or any other part of the body, for example, the shoulder. Manual handling also includes the intentional dropping of a load and the throwing of a load, whether into a container or from one person to another. The moving and handling of objects would therefore include activities involving lifting, carrying, pushing, pulling, holding/supporting, or throwing.

The risks associated with moving and handling activities can be reduced by introducing mechanical assistance for example, such as a sack truck or a powered hoist, when moving large or bulky objects. This will reduce, but not eliminate, manual handling since human effort is still required to move, steady or position the load.

#### 6. Assessing the Risks

Where general risk assessments indicate the possibility of a risk to employees or other persons from moving and handling of objects a risk assessment must be undertaken. Any approach to manual handling which concentrates solely on weight will be misleading. The Manual Handling Operations Regulations set no specific requirements, such as weight limits. Instead, they focus on the needs of the individual and set out a hierarchy of measures for safety during manual handling operations:

- Assess all moving and handling operations that cannot be avoided;
- Avoid moving and handling operations which pose a significant risk of injury by redesigning the task or mechanising the process wherever practicable;
- Recognise and have knowledge of individual capabilities;
- Reduce the risk of injury by making improvements to the task, load and working environment by the introduction of control measures;
- Ensure that the introduction of control measures to reduce existing risks does not present any new risks.

The council has chosen to adopt the HSE 'manual handling assessment chart' [MAC] tool as the method of assessing moving and handling risks in the workplace.

Managers and supervisors must ensure that moving and handling assessments are undertaken using either the MAC tool (Appendix 1) or the pushing and pulling Assessment (Appendix 3) for activities where a significant risk has been identified. Appropriate action must be taken to control any identified risks and suitable and sufficient information, instruction and training should be provided to all employees who undertake activities involving moving and handling.

#### When do I do one?:

A general risk assessment will indicate that a manual handling operations risk assessment should be completed. For example, if there are any lifting, carrying, pushing and/or pulling operations' within the task.

#### Who does it?:

This will be the risk assessment team, ie. managers/supervisors, employee's, safety officers, trade union reps, etc. assigned to undertake risk assessments for the task/activity.

#### What next?:

Develop an action plan. The example in appendix 1 (part C) can be used. Implement the outcomes from the risk assessment in priority of risk. Inform employees of the significant findings from the risk assessment.

A copy of the risk assessment should be retained on file and reviewed every year or in the event of changes/adverse occurrence.

Assessments should then be reviewed:

- At least annually, or;
- Following an accident, or if discomfort is reported;
- If there is reason to suspect that the assessment is no longer valid;
- If the way the work activity is carried out changes.

# 7. Undertaking Assessments

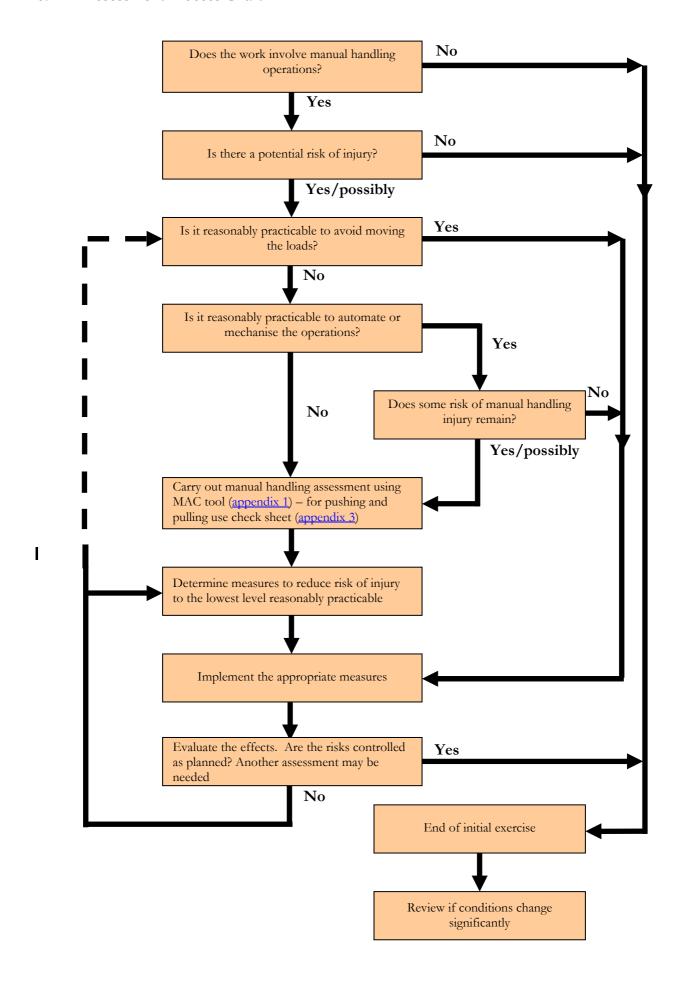
The best advice is to use common sense in looking at the various manual handling operations and weigh up whether there is a risk. The assessment should identify what parts of the task involve moving and handling operations and what risk they pose to your members of staff.

The main points you have to look at are:

- The nature of the load (for example is it heavy, bulky, hard to grasp?);
- The nature of the task (for example do your employees have to reach, bend, stoop, stretch, twist? how often?);
- The nature of the working environment (for example are there uneven or slippery floors or stairs? Is it hot, cold, windy or poorly lit?);
- Individual capability (for example does the job require unusual height or strength? Could it be safely done by someone who is pregnant or has a health problem?).

The following process chart will assist you in determining if there is a requirement to undertake a detailed assessment of any identified risks associated with a particular moving and handling activity.

#### 8. Assessment Process Chart



### 9. What Should Happen To The Assessment?

You should use the assessment as a basis for your action plan to reduce the risk of injury. You will need to develop a 'safe working method' from the risks identified. The risk assessment should then be retained on file for future use, for example during reviews or accident investigation.

#### 10. Control Measures

Having completed a MAC assessment, managers and supervisors must then introduce suitable and sufficient control measures which must reduce any identified risks down to the lowest reasonably practicable level.

When determining ways of reducing identified risks associated with a particular activity to the lowest practicable level, consideration should be given to:

- Elimination for example, consider if the activity can be avoided?
- Substitution for example, consider if heavier materials can be substituted for lighter ones?
- Mechanisation where elimination and substitution are not an option, can the process be mechanised or have other technical measures been introduced such as hoists, trolleys and vacuum lifting devices to reduce the amount of physical handling?

Where the above controls are not practicable and there is still a need to manually handle objects, appropriate safe systems of work will still need to be introduced. These must take in to account organisational measures such as:

- Individual capability;
- The load:
- The task;
- The environment;
- Activity rotation;
- Introduction of suitable breaks.

## 11. Training

The council is required to provide its employees with suitable and sufficient information, instruction and training to allow them to undertake their work safely.

Managers and supervisors must ensure that employees understand that safe systems of work for manual handling operations are designed and introduced for their safety and the safety of others. Employees should receive induction training, training delivered by central training, and 'tool box talks' delivered by managers/supervisors. This should provide a clear understanding of:

- The potential hazards associated with handling operations;
- How to deal with unfamiliar handling operations;
- The proper use of handling aids;
- The proper use of personal protective equipment;
- The way the working environment affects safety;
- The need for good housekeeping;
- The factors affecting individual capability;
- Good handling techniques.

### 12. Making the Assessment

In making an assessment managers and supervisors should distinguish between a <u>specific</u> assessment for a particular task, and a <u>generic</u> assessment for a range of similar tasks.

A specific assessment will focus on a particular activity which has specific hazards associated with a task and/or is a unique or individual activity or has particular elements associated with it.

A generic assessment can encompass a number of tasks, each of which present similar levels of hazard and risk. Broad based assessments may apply to the same tasks undertaken in one location or across multiple sites. When undertaking and implementing broad based assessments the higher levels of hazard and risk should be applied equally to all.

### 13. Using the MAC tool

The MAC tool is an interactive HSE form and can be accessed via the safety services insight page. To use the tool you will need to open the document with Adobe Reader and then make a copy using 'Save As'.

The MAC tool uses a numerical score and a traffic light approach to indicate the level of risk and considers manual handling as three types of distinct operation:

- Single lifting operation;
- Single carrying operation;
- Team handling operation.

These operations are divided into the different manual handling factors and presented as a flow chart. The flow chart leads you, step-by-step, through each factor of the manual handling operation, enabling you to evaluate and grade the degree of risk.

Each operation is supported by an assessment guide or aide memoire. These discuss each factor of the flow chart giving pointers to help you score the task you are observing.

To enable you to calculate the risk for the load and frequency of a lifting/carrying operation a graph is supplied with the flowchart.

**Appendix 1 (MAC Tool Kit)** 

Appendix 2 (HSE Guidance indg383.pdf)

#### 14. Movement and Handling of Animals

The basic principles of handling apply to any situation however, in the case of animals the main differences are that the 'load' may offer active assistance or resistance during handling.

The handling of animals can be approached in a similar manner to the assessment for the movement and handling of people, however there will be additional issues to take into consideration.

An animal could be aggressive and may butt, stamp, bite, etc. The assessment should also consider other hazards associated with the task – e.g. microbiological, or 'zoonosis' (diseases which can be transmitted from animals to humans).

## 15. Pushing and Pulling?

Although you may think that the Manual Handling Operations Regulations only apply to the lifting, lowering and carrying of loads, they also apply to pushing and pulling.

The MAC tool cannot however assess operations where pushing and pulling elements are involved we therefore need to look at these differently.

Pushing and pulling of loads is a way to avoid manual lifting and carrying of objects such as by putting the load on a trolley. However, when people push and pull, for example trolleys, there may be risk of other musculoskeletal disorders (MSDs), which you need to consider and eliminate or reduce.

When assessing operations which involve pushing and pulling, consideration must be given to the following factors:

- The task high initial forces to get the load moving, manoeuvring the load etc;
- The load or object has it good hand holds, is it stable etc;
- Wheels and castors are they suitable for the type of load;
- The working environment constraints on body posture, confined spaces, poor lighting and negotiating through doors, etc;
- Individual capability does the task require unusual capability, is the task a hazard to those with pre-existing health conditions etc;
- Equipment are trolleys, carts, floor surfaces poorly maintained etc;
- Work organisation are there sudden changes in workload, are tasks varied and sufficient rest breaks provided?

## 16. Undertaking a Risk Assessment of Pushing & Pulling Activities

The guideline figures for stopping/starting a load and for keeping a load in motion are provided in guidance booklet <u>L23 Manual Handling</u>. If these guideline figures are exceeded a full risk assessment should be made.

#### Guideline figures for pushing and pulling

	Men	Women
For stopping or starting a load	20 kg	15 kg
For keeping load in motion	10 kg	7 kg

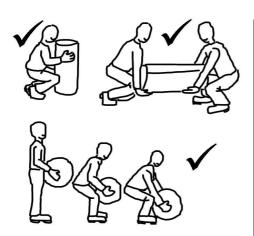
However, these figures assume that the force is applied using where the hands are positioned between knuckle and shoulder height and the distance involved is no more than about 20m whether the load is slid, rolled or supported on wheels. If these assumptions are not met, then a more detailed assessment is needed. Also, a detailed risk assessment should be carried out if risk factors such as uneven floors, confined spaces or trapping hazards are present.

### 17. The Pushing & Pulling of Loads Assessment Checklist

The pushing and pulling assessment checklist will allow for a suitable assessment of pushing and pulling activities to be undertaken. <u>Appendix 3 (Pushing and Pulling assessment checklist)</u>.

## 18. A Few Simple Tips When Moving & Handling.

- Always use mechanical handling methods instead of manual handling if possible e.g. a trolley or sack barrow etc;
- Know your capabilities; only tackle lifts you can handle; can you handle the load yourself; do you need assistance?
- Is there a clear walkway with good lighting to the work area?;
- Always check you know the weight of the load before lifting;
- Wear gloves to protect against cuts and punctures;
- Wear safety boots or sensible covered shoes to protect from falling loads;
- Carry out a trial lift by rocking the load from side to side, then;
- Try lifting it a small amount to get a 'feel' for it.



- J Do stand reasonably close to the load, feet hip-width apart, one foot slightly forward pointing in the direction you're going
- √ Bend your knees and keep your back straight
- √ Get a secure grip on the load
- J Breathe in before lifting as this helps support the spine
- Use a good lifting technique, keep your back straight and lift using your legs
- Visit Note 1 is a second of the second of
- **J** Lift slowly and smoothly
- √ When two or more people are lifting a load, one person must take control and co-ordinate the lift.
- **X** DON'T carry a load too close to your body
- X DON'T carry a load that obscures your vision
- **X** AVOID jerky and sharp movement
- **X** AVOID twisting your body when lifting or carrying a load
- **X** DON'T lift to a height from the floor, do the lift in stages

BAD MANUAL HANDLING TECHNIQUES WILL ONLY CAUSE INJURIES



# **Appendices**

<u>Appendix 1 – Downloadable interactive copy of the MAC Tool Score Sheet.</u>

<u>Appendix 2 – Manual Handling Assessment Charts – INDG383</u>

Appendix 3 – Pushing and Pulling of Loads Assessment Checklist

# Appendix 3 Pushing and Pulling of Loads: Assessment Checklist

# Section A - Preliminary

Task name:	Is an assessment needed?
Task description:	(An assessment will be needed if there is a potential risk of injury, eg if the task falls outside the guidelines in Appendix 3).
	Yes/No*
Load weight:	
Frequency of operation:	
Push/pull distances:	
Are other push/pull tasks carried out by these operators?	
Assessment discussed with employees/safety representatives:	*Circle as appropriate

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

Operations covered by this assessment (detailed description):	Diagrams (other information including existing control measures):
Locations:	
Personnel involved:	
Date of assessment:	

Overall assessment of the risk of injury?

Low/Medium/High\*

\*Circle as appropriate

Make your overall assessment after you have completed Section B.

# Section B: Pushing and Pulling - More detailed assessment, where necessary

Questions to consider:		If yes, tick appropriate level of risk		Problems occurring from the task (Make rough notes in this column in preparation for the possible	Possible remedial action, eg changes that need to be made to the task, load, working environment etc.	
	Low	w Med High remedial action to be taken)		remedial action to be taken)	Who needs to be involved in implementing the changes?	
Do <b>the tasks</b> involve:						
high initial forces to get the load moving?		•				
high forces to keep the load in motion?		•				
<ul> <li>sudden movements to start, stop or manoeuvre the load?</li> </ul>						
<ul> <li>twisting/manoeuvring of the load into position or around obstacles?</li> </ul>						
one-handed operations?						
• the hands below the waist or above shoulder height?						
movement at high speed?						
movement over long distances?						
repetitive pushing/pulling?						
The <b>load or object</b> to be moved:						
does it lack good handholds?		•				
• is it unstable/unpredictable?		•				
• is vision over/around it restricted?		•				
If on wheels/castors, are they:						
unsuitable for the type of load?						
unsuitable for the floor surface/work environment?						
difficult to steer?		•	<u> </u>			
easily damaged or defective?						
without brakes or difficult to stop?						
with brakes, but the brakes are poor/ineffective?						
without a planned inspection and maintenance						
regime based on a frequency that keeps them in						
working order?						

# Section B: Pushing and Pulling - More detailed assessment, where necessary

Questions to consider:		If yes, tick appropriate level of risk		Problems occurring from the task (Make rough notes in this column in preparation for the possible	Possible remedial action, eg changes that need to be made to the task, load, working environment etc.
	Low	Med	High	remedial action to be taken)	Who needs to be involved in implementing the changes?
Consider the working environment - are there:					
• constraints on body posture/positioning?					
<ul> <li>confined spaces/narrow doorways?</li> </ul>					
<ul> <li>surfaces or edges to cause cuts/abrasions/burns to</li> </ul>					
hands or body?	<u> </u>	•			
• rutted/damaged/slippery floors?		_			
• ramps/slopes/uneven surfaces?					
• trapping or tripping hazards?		•			
poor lighting conditions?					
<ul><li>hot/cold/humid conditions?</li></ul>					
• strong air movements?		•			
Consider individual capability - does the job:					
require unusual capability?					
hazard those with a health problem or a physical or		•			
learning difficulty?					
hazard those who are pregnant?					
• call for special information/training?					

# Section B: Pushing and Pulling - More detailed assessment, where necessary

Questions to consider	Yes/No	Problems occurring from the task (Make rough notes in this column in preparation for the possible remedial action to be taken)	Possible remedial action, eg changes that need to be made to the task, load, working environment etc. Who needs to be involved in implementing the changes?
Other factors to consider			
<ul> <li>Equipment</li> <li>Is movement or posture hindered by clothing or personal protective equipment?</li> </ul>	Yes/No		
Is there an absence of the correct/suitable     PPE being worn?	Yes/No		
Are trolleys/carts/floor surfaces poorly maintained/cleaned/repaired?	Yes/No		
Is there a lack of regular maintenance procedures for the equipment?	Yes/No		
<ul> <li>Work organisation</li> <li>Do employees feel that there has been a lack of consideration given to the planning and scheduling of tasks/rest breaks?</li> </ul>	Yes/No		
Do employees feel that there is poor communication between users of equipment and others (eg 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 employees feel they have not been given enough training and information to carry out the task successfully?	Yes/No		

# Section C – Summary of all remedial actions to be taken

Possible remedial actions as identified in sections A and/or B, in order of priority:	Person responsible for implementing controls	Target implementation date	Completed Y/N		
1					
2					
3					
4					
5					
6					
7					
8					
9					
Date by which actions should be completed:					
Date for review of assessment:					
Name of person undertaking the assessment: Line Manager Approval (Name):		Signature: Signature:			