

**The
Highland
Council**
Comhairle na
Gaidhealtachd

SERVING The Highland Community

GUIDANCE NOTES

ON

MANUAL

HANDLING OPERATIONS

*The Highland Council, Corporate Services,
Health & Safety Team*

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GUIDANCE NOTE FOR MANUAL HANDLING OPERATIONS

Version 1

Introduction

More than a quarter of the accidents reported each year to the enforcing authorities (HSE or Local Authority) are associated with manual handling. Although fatal manual handling accidents are rare, the vast majority result in over-three day injury most commonly a sprain or strain, often of the back

Sprains and strains are caused by incorrect application and/or prolongation of bodily force. Poor posture and excessive repetition of movement can be important factors in their onset. Many manual handling injuries are cumulative rather than being attributable to any single handling incident. The injured do not always make a full recovery, the result can be physical impairment or even permanent disability.

The following guidance notes are therefore designed to assist in the implementation of the Highland Council policy on Manual Handling with the aim of eliminating or reducing the risk of injury to those involved in manual handling activities.

Legal Requirements

The Health & Safety at Work etc Act 1974 places a general duty on employers to ensure so far as is reasonably practicable the health, safety and welfare at work of their colleagues. In particular, employers must make arrangements to ensure so far as is reasonably practicable, safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances.

The main legislative requirements relating to manual handling however are contained in the Manual Handling Operations Regulations 1992, which came into force on 1st January 1993.

These regulations require employers, as far as is reasonably practicable, to:-

- Avoid manual handling wherever possible
- Assess the risk of those manual handling activities that cannot be avoided
- Reduce the risk of injury to the lowest level possible.

Definition of Manual Handling

"Manual handling operations" means any transporting or supporting of a load, (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or by bodily force.

The following guidance on what constitutes manual handling operations is taken from the HSE guidance notes attached to the Manual Handling Operations Regulations.

The Regulations apply to the manual handling of loads, ie by human effort, as opposed to mechanical handling by crane, lift trucks etc. The human effort may be applied directly to the load, or indirectly by hauling on a rope or pulling on a lever. Introducing mechanical assistance, for example a sack truck or a

powered hoist, may reduce but not eliminate manual handling since human effort is still required to move, steady or position the load.

Manual handling includes 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 receptacle or from one person to another.

The application of human effort for a purpose other than transporting or supporting a load does not constitute a manual handling operation. For example turning the starting handle of an engine or lifting a control lever on a machine is not manual handling, nor is the action of pulling on a rope while lashing down cargo on the back of a vehicle.

Avoidance of Manual Handling

As with all forms of risk assessment the most effective method of control is to eliminate the hazard where possible. The Manual Handling Regulations therefore require employers to avoid the need for employees to undertake any manual handling operations at work which involve a risk to their being injured if it is reasonably practicable to do so.

Risk of Injury

A judgement has to be made regarding the nature and likelihood of injury associated with any manual handling activity. Detailed assessment may not be necessary if the handling operations can be avoided or the risk of injury is clearly **LOW**.

Appendix 1 provides some numerical guidelines in determining the risk of injury and can be applied in straightforward cases.

As previously mentioned the first step should be to avoid the manual handling of loads altogether. If this cannot be achieved then the following questions should be asked:-

- Can the operations be automated?
- Can the operations be mechanised?

Where it is not reasonably practicable to avoid the need to undertake manual handling **and a risk of injury remains** (See Appendix 1), then a suitable and sufficient assessment of the process must be carried out.

Assessment of Risk

Where the initial assessment of a manual handling process determines that there is a risk of injury then a more specific assessment is required taking into account the following factors:-

- The task
- The load
- The working environment
- Individual capability

Detailed assessments should only be undertaken by persons **competent** to do so. Within the Highland Council therefore this should be confined to persons who have attended a manual handling assessment training course. (See Section 7).

Making An Assessment

An assessment checklist is contained in Appendix 2, together with a copy of a worked example taken from the HSE's guidance booklet. The checklist breaks the Manual handling operation down into the following key areas.

THE TASK

The questions posed in relation to the task are:-

- a. Is the load held or manipulated at a distance from the trunk?* - As the load is moved away from the trunk, the general level of stress on the lower back rises.
- b. Does the task involve twisting the trunk?* – Stress on the lower back is increased significantly if twisted trunk postures are adopted. Still worse is to twist while supporting a load.
- c. Does the task involve stooping?* – Stress on the lower back is increased by bending or leaning forward as the weight of the trunk is added to the load being handled.
- d. Does the task involve reaching upwards?* Reaching upward places additional stress on the arms and back and makes control of the load more difficult.
- e. Does the task involve excessive lifting or lowering distances?* – Lifting or lowering through a large distance is likely to necessitate a change of grip part way, thus increasing the risk of injury.
- f. Does the task involve excessive carrying distances?* - If a load is carried for an excessive distance, physical stresses are prolonged leading to fatigue and increased risk of injury. As a rough guide carrying a load for more than 10 metres results in the physical demands of carrying outweighing those of lifting and lowering.
- g. Does the task involve pushing or pulling of the load?* – The risk of injury is increased if pushing or pulling is carried out with the hands much below knuckle height or above shoulder height. The risk of slipping is also increased.
- h. Does the task involve a risk of sudden movement of the load?* – Sudden movement caused by pulling a load free from a jammed position for example can result in unpredictable stresses on the body, creating a risk of injury.

- i. Does the task involve frequent or prolonged physical effort?* A modest load handled frequently can create as large a risk of injury as one-off handling of a more substantial load. Prolonged physical stresses produce fatigue, which can increase the risk of injury.
- j. Does the task involve insufficient rest or recovery periods?* – Failure to counter fatigue by providing rest or recovery breaks during physically demanding work, increases ill-health and reduces output.
- k. Does the task involve a rate of work imposed by a process?* Fatigue can become pronounced if the rate of work cannot be varied by the handler, leading to an increased risk of injury.

THE LOAD

The following aspects of the load must be considered when assessing the risk of injury associated with a manual handling activity.

- a. Is the load heavy?* - The numerical guidelines in Appendix 1 consider the weight of the load in relation to other important factors.
- b. Is the load bulky or unwieldy?* – In general, if any dimension of the load exceeds about 75cm, its handling is likely to pose an increased risk of injury, especially if the size is exceeded in more than one dimension. Other factors to consider are whether there are convenient handholds, whether the load will interfere with vision and whether the centre of gravity is offset.
- c. Is the load difficult to grasp?* – If the load is difficult to grasp, for example because it is large, rounded, smooth, wet or greasy, its handling will call for extra grip strength – which is tiring and may increase the risk of it being dropped.
- d. Is the load unstable or are its contents likely to shift?* – If the load is unstable, for example because it lacks rigidity or has contents that are likely to shift, the likelihood of injury is increased. Handling people or animals falls into this category.
- e. Is the load sharp, hot or otherwise potentially damaging?* – If the load has sharp edges, rough surfaces, or is too hot or too cold to touch without protective clothing, then an impaired grip or poor posture may result in an increased risk of injury.

THE WORKING ENVIRONMENT

The environment in which a manual handling activity is carried out can have an effect on the likelihood of injury occurring. The following factors should therefore be considered:-

a) Are there space constraints preventing good posture?

Low work surfaces or restricted headroom will enforce a stooping posture; furniture, fixtures or other obstructions may increase the need for twisting or leaning, constricted working areas and narrow gangways will hinder the manoeuvring of bulky loads,

b) Are there uneven, slippery or unstable floors?

Uneven or slippery floors increase the likelihood of slips, trips and falls as well as hindering smooth movement of the load. Unstable floors for example on

boats or mobile work platforms increase the risk of injury through the imposition of sudden unpredictable stresses.

c) Are there variations in level of floors or work surfaces?

The presence of steps, steep slopes or the use of a ladder can increase the risk of injury by adding to the complexity of movement when handling loads. Excessive variation between the heights of working surfaces, storage shelving etc will increase the range of movement and the scope for injury.

d) Are there extremes of temperature or humidity?

High temperature or humidity can cause rapid fatigue and perspiration on hands may reduce grip. Similarly, work at low temperatures may impair dexterity and gloves or other protective clothing may reduce grip.

a. Are there ventilation problems or gusts of wind?

Inadequate ventilation can hasten fatigue and sudden gusts of wind can make large loads difficult to manage safely.

b. Are there poor lighting conditions?

Dimness or glare may cause poor posture, for example by encouraging stooping. Contrast between areas of bright light and deep shadow can aggravate tripping hazards and hinder the accurate judgement of height and distance.

INDIVIDUAL CAPABILITY

The ability to carry out manual handling in safety varies with individuals. The following factors must therefore be taken into account:-

Does the task require unusual strength, height, etc?

In general the lifting strength of women is less than that of men. However, for both men and women the range of individual strength and abilities is large, and there is considerable overlap – some women can deal safely with greater loads than some men.

Physical capability also varies with age. The risk of manual handling injury may be somewhat higher for employees in their teens or in their 50s and 60s. In addition older workers may become fatigued sooner and will take longer to recover from musculoskeletal injury. As a general rule, the risk of injury should be regarded as unacceptable if the manual handling operations cannot be performed satisfactorily by most reasonably fit, healthy employees.

Does the job put at risk those with a disability or health problem?

The Disability Discrimination Act 1995 places a duty on employers to make reasonable adjustments to the workplace or employment arrangements so that a disabled person is not disadvantaged compared to a non-disabled person. This might include, for example arranging to limit the number, size or weight of loads handled by someone with a disability that limits their manual handling capacity. It might also mean providing suitable manual handling aids.

If there is good reason to suspect that an individual's state of health might significantly increase the risk of injury from manual handling operations, then medical advice should be sought. In the first instance a referral should be made to the Council's Occupational Health Adviser.

Does the job put at risk those who might be pregnant?

Manual handling has significant implications for the health of the pregnant worker (and the foetus), particularly if combined with long periods of standing or walking. There is specific reference to the risks associated with pregnancy in the Management of Health & Safety at Work Regulations. It is essential therefore to determine how workers can continue to work safely during pregnancy using the following plan:-

- i. Re-assessment of the handling task to consider what improvements might be made.
- ii. Training in recognising ways in which work organisations may be altered to accommodate changes in posture and physical capability, including the timing and frequency of rest periods.
- iii. Consideration of job-sharing, relocation or suspension on full pay where the risk cannot be reduced by a change in the working conditions.
- iv. Liaison with the GP to confirm that the pregnant worker is capable of performing work duties; and
- v. Careful monitoring of the employee's return to work following childbirth to assess the need for changes to work organisation.

The Occupational Health Adviser can assist with all aspects of the above assessment process. It is recommended therefore that employing Services contact the OHA for advice when they have been informed that an employee is pregnant.

Does the task require special information or training for its safe performance?

The provision of suitable information, instruction and training is a statutory obligation which has particular relevance in terms of ensuring that employees carry out manual handling operations safely. For example ignorance of any unusual characteristics or loads, or of a system of work designed to ensure safety during manual handling, may lead to injury.

Further information on Manual Handling Training is given in Section 7 of this guidance.

Reducing the Risk of Injury

Where manual handling activities can not be avoided then it will be necessary as part of the assessment process to take appropriate steps to "**reduce the risk of injury to the lowest level reasonably practicable**"

Because of the varying nature of manual handling operations, the most appropriate risk reduction measures may be different in each case. The following is a list of suggested measures that can be taken to reduce the risk of injury. The most appropriate or combination of actions must be determined in relation to each individual activity.

- a. **Ergonomics** – Fit the operation to the individual rather than the other way round.
 - b. **Mechanical Assistance** – The use of hoists, trolleys, sack trucks and conveyors etc.
 - c. **Involve the Workforce** – Employees and their representatives should be involved in the development of safe systems of work.
 - d. **Use Industry Specific Guidance** – can give valuable information on known effective preventive action.
 - e. **Improve task layout** – ensure optimum position for storing loads etc.
 - f. **Use the body more efficiently** – need for training in correct handling technique
 - g. **Improve the work routine** – Minimise the need for fixed postures, use flexible rest periods, job rotation etc.
 - h. **Team handling** – Teams of 2 or more can assist where a load is too heavy, difficult or unsafe for an individual.
 - i. **Make the load lighter** – Liquids and powders etc could be packaged in smaller containers.
 - j. **Make the load smaller or easier to manage** – Wherever possible specify small or manageable quantities when ordering materials etc
 - k. **Make it easier to grasp** – Consider fitting handles, hand grips or indents to improve the handlers' grasp.
 - l. **Make it more stable** – containers holding liquids or free moving powders etc should be well filled to avoid weight shift.
 - m. **Make it less damaging to hold** – Ensure surfaces are clean and provide suitable PPE if sharp corners or edges cannot be avoided.
 - n. **Remove space constraints** – Provide sufficient clear floor space and sufficient room to manoeuvre the object to be lifted.
 - o. **Ensure floor surfaces are sound** – Temporary work platforms should be firm and stable, avoid wet floors and steep slopes.
 - p. **Working environment** – Ensure that temperature, ventilation, heating and lighting are suitable for the task.
 - q. **Personal considerations** – Take account of employee health problems such as bad backs, knees, hips etc. which could affect their manual handling capability. Pregnancy also demands special consideration. Fitness and strength are important, also whether a new task will involve unaccustomed exertion.
1. Further advice on Risk reduction measures can be obtained by contacting the Health & Safety Team.

Training

Training in Manual Handling techniques can help reduce the risk of injury, but all other aspects of risk reduction outlined in Section 6 must also be applied as training alone will be an insufficient control measure.

Service Directors and Area Service Managers must ensure that sufficient numbers of staff are trained in the Risk assessment process to carry out Manual handling assessments of the work activities carried out by their employees.

Services should also ensure that employees who are expected to carry out manual handling tasks are provided with suitable training on safe handling and lifting techniques.

The Highland Council Training and Development Team organise courses in both Risk Assessment and Manual Handling. Details of the Manual Handling course content are included in Appendix 3.

A member of the Highland Council Health & Safety Team is a ROSPA registered Manual Handling Instructor and Risk Assessor. Where Services have specific manual handling training needs in respect of activities undertaken by employees, they should contact the Health & Safety Team for advice in the first instance. It may be possible to organise either Service or Area specific training in those circumstances.

Monitoring and Review

A flowchart is contained in Appendix 4 which outlines the Manual handling assessment process.

The control measures introduced as part of the risk reduction process must be regularly monitored to ensure that they are effective in preventing injury.

Any manual handling assessment must be reviewed if:-

There is a reason to suspect it is no longer valid; or

There has been a significant change in the manual handling operations to which it relates.

Manual handling assessments must also be reviewed if a reportable injury occurs. In this case the manager responsible for the work activity being undertaken at the time of injury will be required to submit a copy of the revised assessment together with the internal accident report form, to the Health & Safety Team.

Line Manager/Employee Duties

Line Managers must ensure that employees who undertake manual handling activities are consulted during the risk assessment process and that their views on safe methods of working are taken into account.

Line Managers must also inform employees of the result of the assessment process and ensure that sufficient information, instruction, training and/or equipment is provided to enable the activity to be undertaken safely.

Employees must ensure that they:-

Comply with any instruction and training provided in safe manual handling techniques.

Do not put their own health and safety or that of others at risk by carrying out an unsafe manual handling activity.

Use equipment that has been provided to eliminate or reduce manual handling.

Report problems including physical and medical conditions (eg pregnancy) which may affect their ability to undertake manual handling activities to their line manager.

Manual handling risk assessment detailed assessment guidelines filter

Introduction

1 The Manual Handling 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:

- (a) avoid hazardous manual handling operations so far as is reasonably practicable;
- (b) make a suitable and sufficient assessment of any hazardous manual handling operations that cannot be avoided; and
- (c) reduce the risk of injury from those operations so far as is reasonably practicable.

Risk assessment filter

2 Where manual handling operations cannot be avoided, employers have a duty to make a suitable and sufficient assessment of the risks to health. This assessment must take into account the range of relevant factors listed in Schedule 1 to the Regulations. A detailed assessment of every manual handling operation, however, could be a major undertaking and might involve wasted effort. Many handling operations, for example lifting a tea cup, will involve negligible handling risk. To help identify situations where a more detailed risk assessment is necessary, HSE has developed a filter to screen out straightforward cases.

3 The filter is based on a set of numerical guidelines developed from data in published scientific literature and on practical experience of assessing risks from manual handling. They are pragmatic, tried and tested; they are not based on any precise scientific formulae. The intention is to set out an approximate boundary within which the load is unlikely to create a risk of injury sufficient to warrant a detailed assessment.

4 The application of the guidelines will provide a reasonable level of protection to around 95% of working men and women. However, the guidelines should not be regarded as safe weight limits for lifting. There is no threshold below which manual handling operations may be regarded as 'safe'. Even operations lying within the boundary mapped out by the guidelines should be avoided or made less demanding wherever it is reasonably practicable to do so.

5 It is important to remember that the purpose of the guidelines is to avoid wasted time and effort. The use of the filter will only be worthwhile, therefore, where the relevance of the guideline figures can be determined quickly, say within 10 minutes. If it is not clear from the outset that this can be done, it is better to opt immediately for the more detailed risk assessment.

Guidelines for lifting and lowering

6 The guidelines for lifting and lowering operations assume that the load is easy to grasp with both hands and that the operation takes place in reasonable working conditions with the handler in a stable body position. They take into consideration the vertical and horizontal position of the hands as they move

the load during the handling operation, as well as the height and reach of the individual handler. For example if a load is held at arm's length or the hands pass above shoulder height, the capability to lift or lower is reduced significantly.

7 The basic guideline figures for identifying when manual lifting and lowering operations may not need a detailed assessment are set out in Figure 22. If the handler's hands enter more than one of the box zones during the operation, the smallest weight figures apply. It is important to remember, however, that the transition from one box zone to another is not abrupt; an intermediate figure may be chosen where the handler's hands are close to a boundary. Where lifting or lowering with the hands beyond the box zones is unavoidable, a more detailed assessment should always be made.

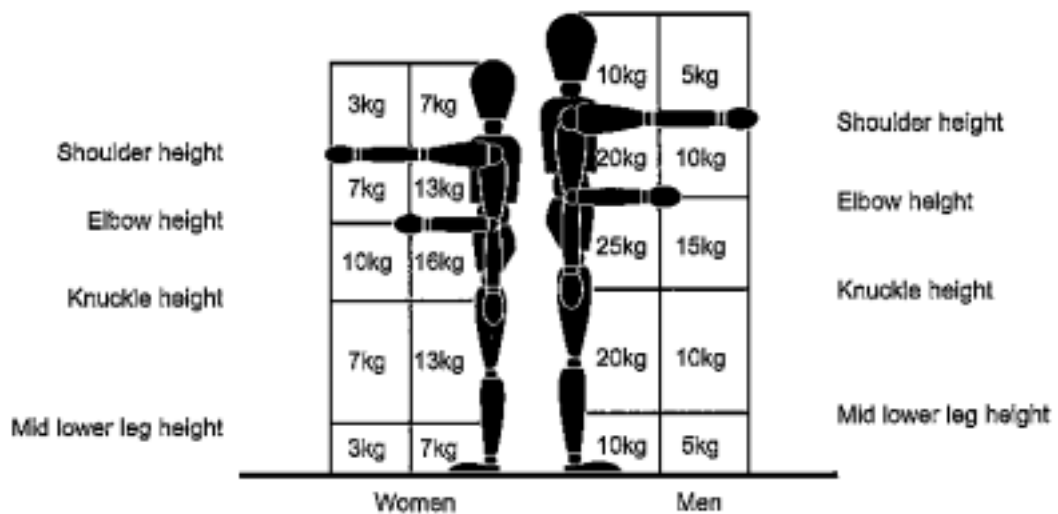


Figure 22 Lifting and lowering

8 These basic guideline figures for lifting and lowering are for relatively infrequent operations - up to approximately 30 operations per hour. The guideline figures will have to be reduced if the operation is repeated more often. As a rough guide, the figures should be reduced by 30% where the operation is repeated once or twice per minute, by 50% where the operation is repeated around five to eight times per minute and by 80% where the operation is repeated more than about 12 times per minute.

9 Even if the above conditions are satisfied, a more detailed risk assessment should be made where:

- the worker does not control the pace of work;
- pauses for rest are inadequate or there is no change of activity which provides an opportunity to use different muscles;
- the handler must support the load for any length of time.

Guidelines for carrying

10 Similar guideline figures apply to carrying operations where the load is held against the body and is carried no further than about 10 m without resting. If the load is carried over a longer distance without resting or the hands are below knuckle height then a more detailed risk assessment should be made.

11 Where the load can be carried securely on the shoulder without first having to be lifted (as for example when unloading sacks from a lorry) the guideline figures can be applied to carrying distances in excess of 10 m.

Guidelines for pushing and pulling

12 For pushing and pulling operations (whether the load is slid, rolled or supported on wheels) the guideline figures assume the force is applied with the hands between knuckle and shoulder height. The guideline figure for starting or stopping the load is a force of about 25 kg (ie about 250 Newtons) for men and about 16 kg (ie about 160 Newtons) for women. The guideline figure for keeping the load in motion is a force of about 10 kg (ie about 100 Newtons) for men and about 7 kg (ie about 70 Newtons) for women.

13 There is no specific limit to the distance over which the load is pushed or pulled provided there are adequate opportunities for rest or recovery.

Guidelines for handling while seated

14 The basic guideline figure for handling operations carried out while seated, shown in Figure 23, is 5 kg for men and 3 kg for women. These guidelines only apply when the hands are within the box zone indicated. If handling beyond the box zone is unavoidable, a more detailed assessment should be made.

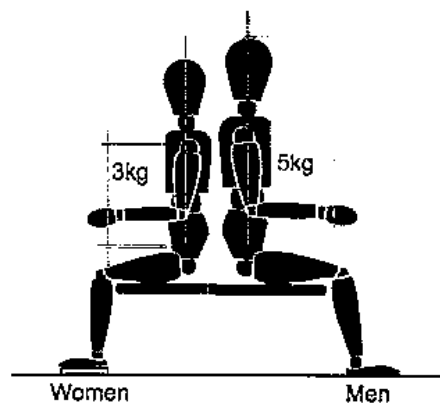


Figure 23 Handling while seated

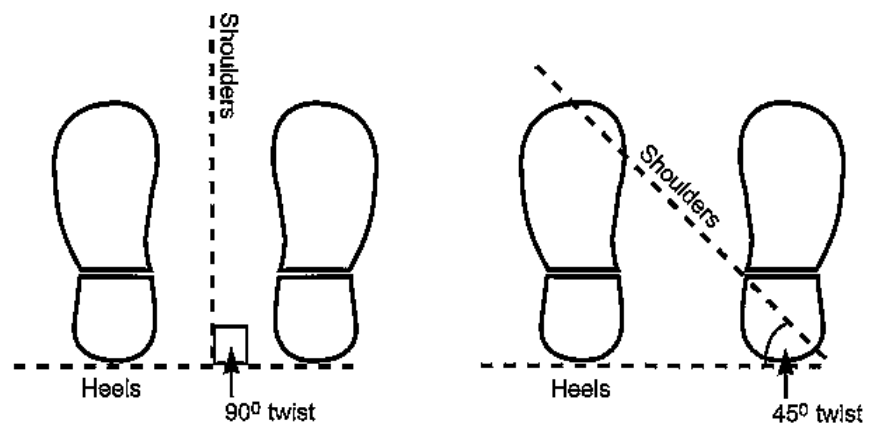


Figure 24 Assessing twist

Other considerations: Twisting

15 In many cases, manual handling operations will involve some twisting (see Figure 24) and this will increase the risk of injury. Where the handling task involves twisting and turning, therefore, a detailed risk assessment should normally be made. However, if the operation is relatively infrequent (see paragraph 8 of this Appendix) and there are no other posture problems then the filter can be used. In such cases, the basic guideline figures shown above should be reduced if the handler twists to the side during the operation. As a rough guide, the figures should be reduced by about 10% where the handler twists through 45° and by about 20% where the handler twists through 90° .

Remember: The use of these guidelines does not affect the employer's duty to avoid or reduce risk of injury where this is reasonably practicable. The guideline figures, therefore, should not be regarded as weight limits for safe lifting. They are an aid to highlight where detailed risk assessments are most needed. Where doubt remains, a more detailed risk assessment should always be made. Even for a minority of fit, well-trained individuals working under favourable conditions, operations which exceed the guideline figures by more than a factor of about two may represent a serious risk of injury. Such operations should come under very close scrutiny.

Manual Handling of Loads: Assessment checklist

Section A - Preliminary:

*Circle as appropriate

Job description: Factors beyond the limits of the guidelines?	Is an assessment needed? (ie is there a potential risk for injury, and are the factors beyond the limits of the guidelines?) <p style="text-align: center;">Yes/No*</p>
--	---

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):
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Section B - See over for detailed analysis

Section C - Overall assessment of the risk of injury? Low/ Med/ High*

Section D - Remedial action to be taken:

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 reassessment:	
Assessor's name:	Signature:

TAKE ACTION ... AND CHECK THAT IT HAS THE DESIRED EFFECT

Manual Handling of Loads : Assessment checklist

Worked example

Section A - Preliminary:

*circle as appropriate

<p>Job description: Pallet loading : boxes containing coiled wire</p>	<p>Is an assessment needed? (ie is there a potential risk for injury, and are the factors beyond the limits of the guidelines?)</p> <p style="text-align: center;">Yes/No*</p>
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If 'Yes' continue. If 'No' the assessment need go no further.

<p>Operations covered by this assessment (detailed description): Operator lifts box, with hook grip, from conveyor, which is 20 inches above the ground, turns, walks 3 metres and lowers box onto a pallet on the ground. Boxes are piled six high on pallet.</p> <p>Locations: Wire factory only</p> <p>Personnel involved: One operator</p> <p>Date of assessment: xx June 19xx</p>	<p>Diagrams (other information): a) Worker; b) Conveyor; c) 48 kg boxes of wires; d) Pallet.</p> <div style="text-align: center;"> </div> <p>Arrows show direction of conveyor belt and worker movements between conveyor and pallet</p>
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Section B - See over for detailed analysis

Section C - Overall assessment of the risk of injury?

Low/ Med/ **High**

Section D - Remedial action to be taken:

<p>Remedial steps that should be taken, in order of priority:</p> <ol style="list-style-type: none"> 1 Review product design to reduce weight of load and improve grip. 2 Review process in light of changes agreed in (1), particularly on customer requirements and transportation. 3 Seek funding for magnetic lifting aid to help with transfer from conveyor to pallet. 4 Seek funding for pallet rotating/height adjustment equipment. 5 Operator to attend manual handling training. 6 Raise conveyor height by 15 inches. 7 Ensure full pallets are removed by pallet truck promptly. 8 Operations manager to ensure no rushing on this job.
<p>Date by which action should be taken: xx December 19xx</p>
<p>Date for reassessment: xx December 20xx</p>
<p>Assessor's name: A N Ouyonous</p>
<p>Signature: A N Ouyonous</p>

Section B - 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 remedial action to be taken)	Possible remedial action (Possible changes to be made to system/task, load, workplace/space, environment. Communication that is needed)
	Low	Med	High		
<p>The tasks - do they involve:</p> <ul style="list-style-type: none"> ● holding loads away from trunk? ● twisting? ● stooping? ● reaching upwards? ● large vertical movements? ● long carrying distances? ● strenuous pushing or pulling? ● unpredictable movement of loads? ● repetitive handling? ● insufficient rest or recovery? ● a workrate imposed by a process? 		✓	✓	<p>1 Twisting when picking up the box</p> <p>2 Stooping when placing box on pallet and stooping when picking box up from the conveyor</p> <p>3 Sometimes extended reaching when placing boxes on pallet.</p>	<p>Remind operator of need to move feet (I).</p> <p>Adjust pallet height - Review availability of rotating, height adjusting equipment (I) and raise height of conveyor (M).</p> <p>Provide better information and instruction (I).</p> <p>Review mechanical handling equipment to eliminate manual lifting (I).</p>
<p>The loads - are they:</p> <ul style="list-style-type: none"> ● heavy? ● bulky/unwieldy? ● difficult to grasp? ● unstable/unpredictable? ● intrinsically harmful (eg sharp/hot)? 	✓	✓	✓	<p>4 Load too heavy. Is the weight of the load a problem for customers too?</p> <p>5 Smooth cardboard boxes are difficult to grasp.</p>	<p>Review product and customer needs with a view to improving product design (L).</p> <p>Provide boxes with hand grips (M).</p>
<p>The working environment - are there:</p> <ul style="list-style-type: none"> ● constraints on posture? ● poor floors? ● variations in levels? ● hot/cold/humid conditions? ● strong air movements? ● poor lighting conditions? 	✓	✓	✓	<p>6 Bad postures encouraged by obstructions when full pallets are not removed.</p>	<p>Introduce system to ensure full pallets removed promptly - Speak to Operations Manager (I).</p>
<p>Individual capability - does the job:</p> <ul style="list-style-type: none"> ● require unusual capability? ● hazard those with a health problem? ● hazard those who are pregnant? ● call for special information/training? 	✓	✓	✓	<p>7 Operator has no history of back pain problems but clear signs of sweating and straining.</p>	<p>Consider job enlargement to introduce variety and allow for recovery time (M).</p> <p>Monitor to ensure no rushing (I).</p> <p>Speak to trainer about manual handling course (I).</p>
<p>Other factors:</p> <p>Is movement or posture hindered by clothing or personal protective equipment?</p>	<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> Yes/No </div>				

Section B - 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 remedial action to be taken)	Possible remedial action (Possible changes to be made to system/task, load, workplace/space, environment. Communication that is needed)
	Low	Med	High		
<p>The tasks - do they involve:</p> <ul style="list-style-type: none"> ● holding loads away from trunk? ● twisting? ● stooping? ● reaching upwards? ● large vertical movement? ● long carrying distances? ● strenuous pushing or pulling? ● unpredictable movement of loads? ● repetitive handling? ● insufficient rest or recovery? ● a work rate imposed by a process? 					
<p>The loads - are they:</p> <ul style="list-style-type: none"> ● heavy? ● bulky/unwieldy? ● difficult to grasp? ● unstable/unpredictable? ● intrinsically harmful (eg sharp/hot)? 					
<p>The working environment - are there:</p> <ul style="list-style-type: none"> ● constraints on posture? ● poor floors? ● variations in levels? ● hot/cold/humid conditions? ● strong air movements? ● poor lighting conditions? 					
<p>Individual capability - does the job:</p> <ul style="list-style-type: none"> ● require unusual capability? ● hazard those with a health problem? ● hazard those who are pregnant? ● call for special information/training? 					
<p>Other factors: Is movement or posture hindered by clothing or personal protective equipment?</p>					
	Yes/No				