



HUMBERSIDE FIRE AND RESCUE SERVICE

HEALTH, SAFETY AND ENVIRONMENT

MANUAL HANDLING

Owner	Director of Service Improvement
Responsible Person	Head of Health and Safety
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1. INTRODUCTION

Humberside Fire and Rescue Service (HFRS) recognises that incorrect manual handling is one of the most common causes of injury at work and is a cause of work-related musculoskeletal disorders. Manual handling will, where reasonably practicable, be avoided and where this is not possible, manual handling risk assessments will be conducted with the objective of reducing the risk of significant injury.

2. EQUALITY AND INCLUSION

HFRS aims to continuously improve the standards of service we provide to the community we serve. We recognise the importance of and are committed to promoting equality and inclusion in the provision of our services and to our employees. We are committed to encouraging equality and diversity amongst our workforce and to eliminating unlawful discrimination. We aim for our workforce to be truly representative of the community we serve and for each of our employees to feel respected and to be able to give their best.

3. MANUAL HANDLING OPERATIONS

Manual handling is covered by the Manual Handling Operations Regulations 1992 (as amended) (MHOR) and 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. A load may be either inanimate, for example a box, a trolley or material supported on a shovel, or animate, for example a person or an animal.

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.

Although the regulations do not cover an implement, tool or machine, such as a drill, fire hose or breathing apparatus, when in use for its intended purpose, HFRS considers it in the interest of all personnel to extend the ethos of the regulations to cover use of equipment.

There are a wide range of manual handling activities carried out within HFRS including, but not limited to:

- Lifting and moving office equipment
- Movement and setting up of computer equipment
- Filling and emptying mop buckets
- Receiving and storing goods
- Carrying of fire hose

Regulation 3(1) of the Management Regulations requires employers to make a suitable and sufficient assessment of the risks to the health and safety of their employees while at work.

Where this general assessment indicates the possibility of risks to employees from the manual handling of loads, the requirements of the MHOR should be complied with:

- avoid hazardous manual handling operations so far as is reasonably practicable;
- assess any hazardous manual handling operations that cannot be avoided; and
- reduce the risk of injury so far as is reasonably practicable.

4. MANUAL HANDLING RISK ASSESSMENTS

HFRS recognises that it would not be reasonably practicable to complete a manual handling assessment of every work-related task. To do this would require disproportionate effort and resources as many tasks will involve minimal risk of injury e.g. putting small gear onto an appliance.

Instead, the procedure which is explained in [Appendix 1](#) has 3 levels:

1. HSE Guidelines to filter activities where the load is unlikely to create significant risk of injury.
2. A more detailed assessment for activities which require further assessment.
3. A full risk assessment in co-ordination with the Health, Safety and Environment Section for any activities where residual risks are rated “unacceptable”.

It must be borne in mind that guidelines are not to be regarded as safe weight limits but will provide a reasonable level of protection to 95% of working men and women based on scientific and practical data. **There are no weight thresholds provided in MHOR.**

More detailed manual handling assessments must consider task, individual, load and environment (**TILE**) and other factors such as the effect of PPE on handling ability.

N.B. Using a mechanical aid, such as a sack truck or a powered hoist, may reduce but not eliminate manual handling as human effort is still required to move the mechanical aid, or to steady or position the load on the aid.

At Risk Persons

In addition to generic manual handling assessments, employees carrying out such activities covered may require specific assessment who:

- are or have recently been pregnant (compiled in co-ordination with Occupational Health);
- have a disability which may affect their manual handling capability (compiled in co-ordination with Occupational Health);
- have recently had a manual handling injury or have a history of back, knee or hip trouble, hernia or other health problems which could affect their manual handling capability (compiled in co-ordination with Occupational Health);
- are young workers or new to the job;
- are older workers (compiled in co-ordination with Occupational Health)

5. APPLICATION OF MHOR TO THE EMERGENCY SERVICES

MHOR makes several references to the work of the emergency services at incidents and in particular the work of the Fire Service.

The Service recognises that manual handling operations at operational incidents should be assessed and controlled generically where possible. These generic assessments will be used to control risk where that risk can be foreseen.

At incidents involving risk from manual handling operations that cannot easily be foreseen or that are different to those anticipated, the Incident Commander will use dynamic risk assessment and put in place appropriate control measures.

The guidance issued in the Regulations broadly states that in emergency situations the extent of the Service's duty to avoid manual handling is qualified by 'so far as is reasonably practicable'. That means the cost of preventative steps should be proportionate to the benefits derived. When considering what is 'reasonably practicable', additional potentially relevant factors which Incident Commanders need to take account of include:

- the seriousness of the need for the lifting operation; and
- the Services' duties to the public and to the particular member of the public who has called for the authority's help.

Taking these factors into account, the level of risk which the Service may ask an operational firefighter to accept may, in appropriate circumstances, be higher when considering the health and safety of those in danger, although this does not mean that firefighters can be exposed to unacceptable risk of injury.

National Operational Guidance for Heavy and Bulky Objects acknowledges greater emphasis is placed on personnel to assess their individual capabilities against the task and apply techniques according to training.

All personnel should also consider:

- Using plant, machinery or other engineering controls (where competent) to reduce manual handling
- Task, individual, load and environment (TILE)

Incident Commanders should consider:

- Rotating personnel undertaking arduous manual tasks and consider relief
- Request additional resources to assist with manual handling tasks

6. RESPONSIBILITIES

Organisation

HFRS will do all that is reasonably practicable to reduce the risk of injury from manual handling operations. This will include:

The Load

Where a risk of injury from the manual handling of a load has been identified, consideration will be given to changing or modifying that load where reasonably practicable. This may include making it lighter, smaller, easier to grasp, more stable and less damaging to hold.

The Working Environment

Where reasonably practicable the working environment maybe modified in order to reduce the risk of injury. This may include improving floor conditions and space, improving the thermal environment and lighting.

Personal Considerations

An individual's health, fitness and strength can significantly affect their ability to carry out a manual handling operation. Following injury, ill health or in other relevant circumstances, individual ability may need to be assessed by the Occupational Health Practitioner and appropriate restrictions recommended. There is an in-house provision in place for this.

Training, Information and Supervision

Training is an effective risk control measure for unavoidable manual handling operations and will be undertaken at the following stages:

- initial induction into the Service
- on the introduction of new equipment and procedures with manual handling implications
- whenever deemed necessary e.g. accident data

Training on general handling techniques will be conducted by the Service's Fitness and Wellbeing Advisors upon request from the Health, Safety and Environment Section.

Specific handling techniques such as: casualty handling (BA, RTC), animal husbandry, water rescue etc. are demonstrated on all technical training courses.

The Service employs a system of supervision of all activities involving risk to personnel; this includes manual handling tasks. The level of supervision will depend on the risk involved and the competence and abilities of personnel (see policy for Control of Health and Safety).

Procurement of New Equipment

As part of the procurement process the Emergency Preparedness / Fleet and Equipment Sections will assess all new equipment. The weight of the equipment will be stated in the instruction and information issued with it.

Where a significant manual handling risk has been identified, the equipment will be marked with its weight, the number of personnel required to lift it where appropriate and the centre of gravity if offset.

An initial appraisal of where to position operational equipment on appliances is conducted using specialist software, which then provides the ideal location for that item based on the HSE guidelines for the female demographic, contained in the Manual Handling Regulations. Where possible, equipment will be placed in the most appropriate position so as not to cause any significant manual handling problems when lifting, lowering or carrying such items to / from the appliance.

Where appropriate, training in the manual handling of new equipment will be arranged by Emergency Preparedness / Fleet and Equipment.

Line Managers

Generic manual handling risk assessments (HS_10's) are available on the online health and safety management system (RIVO). Where a specific handling activity is to be carried out, an assessment must be recorded on an HS_10.

Where manual handling is part of a wider activity, this can be assessed as part of the general risk assessment (HS_14) unless a more detailed assessment is deemed necessary. Managers should use Appendix 1 to direct their efforts to the most appropriate level of assessment (if in doubt, contact the Health, Safety and Environment for a full risk assessment).

Specific manual handling assessments will be carried out by competent persons whose abilities will include:

- an understanding of the Regulations
- a knowledge of the handling operations that are to be assessed

- an awareness of the capabilities and limitations of personnel
- an ability to identify high risk activities
- an ability to recommend reasonably practical solutions to reduce risk
- a judgement of what constitutes an acceptable residual risk

The opinion of employees will be sought in identifying manual handling problems and practical solutions to them.

Cases of unidentifiable causes of musculoskeletal injury or those experiencing a severe outcome for the type of activity must be referred to Occupational Health using the referral process (Occ_08 form) for further examination e.g. "I picked up a hand tool and pulled my back".

Employees

All employees are required to report manual handling injuries as per Service policy for Safety Event Reporting, Recording and Investigation Arrangements.

Regulation 5 of the Manual Handling Operations Regulations 1992 places a duty on all employees to make full and proper use of any system of work provided by his employer.

Regulation 14 of the Management of Health and Safety at Work Regulations 1999 places the following duties on all employees:

Using the equipment, safe systems of work and procedures provided by the Service in accordance with training and instruction given informing their line manager without delay of any situation which may present a serious and imminent danger.

Notifying their line manager of any shortcoming in the health and safety arrangements.

7. FURTHER INFORMATION

For further information the Approved Code of Practice can be obtained from the Health and Safety Section.

APPENDIX 1

Appendix 2 – HSE Guidelines (simple assessment filter)

Carrying

The guidelines below apply when the load:

- is held against the body;
- is carried no further than about 10 m without resting;
- does not prevent the person from walking normally;
- does not obstruct the view of the person carrying it;
- does not require the hands to be held below knuckle height or much above elbow height (owing to static loading on the arm muscles).

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) you can apply the filter values to carrying distances up to 20 m.



Observe the work activity you are assessing and compare it to the diagram and statements above.

For tasks falling within these guidelines, record the findings on RIVO on an HS_10 (section 1 only).

For tasks falling outside of the guidelines, a more detailed risk assessment is required (all sections of HS_10).

Appendix 2 – HSE Guidelines (simple assessment filter)

Pushing and Pulling

This includes sliding, rolling and moving on wheels. These guidelines suggest these activities likely to be low risk if:

- the force is applied with the hands; and
- the torso is largely upright and not twisted; and
- the hands are between hip and shoulder level; and
- the distance involved is no more than about 20 m.

An additional indicator that the task is low risk is if the load can be moved and controlled easily with only one hand.



Observe the work activity you are assessing and if the task requires significant forces for pushing and pulling, as indicated by the posture while the operation is being carried out, then this may require a more detailed assessment.

Even where the task is within the filter, a more detailed risk assessment will be necessary if there are risk factors such as slopes, uneven floors, confined spaces or trapping hazards.

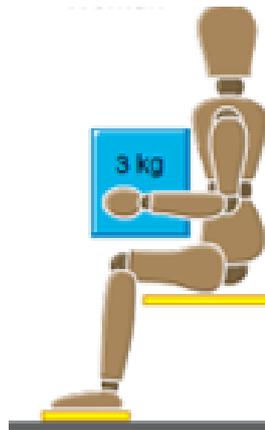
For tasks falling within these guidelines, record the findings on RIVO on an HS_10 (section 1 only).

For tasks falling outside of the guidelines, a more detailed risk assessment is required (all sections of HS_10).

Appendix 2 – HSE Guidelines (simple assessment filter)

Handling While Seated

The 3kg value only applies when the hands are within the zone shown. If handling beyond this box zone is unavoidable, you should make a more detailed risk assessment.



For tasks falling within these guidelines, record the findings on RIVO on an HS_10 (section 1 only).

For tasks falling outside of the guidelines, a more detailed risk assessment is required (all sections of HS_10).

APPENDIX 2

Appendix 3 – Help identifying manual handling hazards and controls

Consideration of the following can assist you in identifying the hazards which may be present during manual handling tasks and to determine effective control measures:

Task

The tasks, do they involve:

- holding loads away from the body?
- twisting, stooping or reaching upwards?
- large vertical movement?
- long carrying distances?
- strenuous pushing or pulling?
- repetitive handling?
- insufficient rest or recovery time?
- a work rate imposed by a process?

Can you:

- use a lifting aid?
- improve workplace layout to improve efficiency?
- reduce the amount of twisting and stooping?
- avoid lifting from floor level or above shoulder height, especially heavy loads?
- reduce carrying distances?
- avoid repetitive handling?
- vary the work, allowing one set of muscles to rest while another is used?
- push rather than pull?

Individual

Individual capacity, does the job:

- require unusual capability, eg above average strength or agility?
- endanger those with a health problem or learning/physical disability?
- endanger pregnant women?
- call for special information or training?

Can you:

- pay particular attention to those who have a physical weakness?
- take extra care of pregnant workers?
- give your employees more information, eg about the range of tasks they are likely to face?
- provide more training (see 'What about training?')
- get advice from an occupational health advisor if you need to?

Load

The loads, are they:

- heavy or bulky?
- difficult to grasp?
- unstable or likely to move unpredictably (like animals)?
- harmful, eg sharp or hot?
- awkwardly stacked?
- too large for the handler to see over?

Can you make the load:

- lighter or less bulky?
- easier to grasp?
- more stable?
- evenly stacked?

If the load comes in from elsewhere, have you asked the supplier to help, eg by providing handles or smaller packages?

Appendix 3 – Help identifying manual handling hazards and controls:

Environment

The working environment, are there:

- restrictions on posture?
- bumpy, obstructed or slippery floors?
- variations in floor levels?
- hot/cold/humid conditions?
- gusts of wind or other strong air movements?
- poor lighting conditions?
- restrictions on movements from clothes or personal protective equipment (PPE)?

Can you:

- remove obstructions to free movement?
- provide better flooring?
- avoid steps and steep ramps?
- prevent extremes of hot and cold?
- improve lighting?
- provide protective clothing or PPE that is less restrictive?
- ensure your employees' clothing and footwear is suitable for their work?

The following factors are to be considered when determining whether handling aids can help avoid manual handling:

Handling aids and equipment:

- is the device the correct type for the job?
- is it well maintained?
- are the wheels on the device suited to the floor surface?
- do the wheels run freely?
- is the handle height between the waist and shoulders?
- are the handle grips in good condition and comfortable?
- are there any brakes? If so, do they work?

Can you:

- adjust the work rate?
- provide equipment that is more suitable for the task?
- carry out planned preventive maintenance to prevent problems?
- change the wheels, tyres and/or flooring so that equipment moves easily?
- provide better handles and handle grips?
- make the brakes easier to use, reliable and effective?

If anyone requires any further guidance / information regarding this document please contact Health, Safety and Environment Section.