Somerset Council

HSG26 Manual Handling Guidance

Organisation	Somerset Council
Title	Manual Handling Guidance
Author	Pam Price
Owner	The Health and Safety Service
Protective Marking	Official - Unclassified
Primary Legislation	Manual Handling Operations Regulations 1992 L23 as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002.

Contents

Purpose of this Guidance

The purpose of this manual handling guidance is to ensure safe systems are devised and implemented to protect employees who are required to manually handle work equipment and objects. This guidance helps employers comply with the Manual Handling Operations Regulations 1992, as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002. It provides managers with practical advice on reducing the risk of injury from manual handling tasks.

The Health and Safety Executive (HSE) has reported that the cause of over a third of all workplace injuries along with work-related musculoskeletal disorders (MSDs) and repetitive strain injuries are due to manual handling. Being unable to safely lift can lead to serious implications for employers and employees may suffer from injuries.

Manual handling includes tasks like lifting, putting down, pushing, pulling, carrying, or moving loads by hand or bodily force. Key points to consider are to avoid manual handling tasks that pose a risk of injury and if they cannot be avoided, practice safe lifting techniques. Remember, while specific weight limits are not set by law, it is essential to prioritise safety and minimise risks associated with manual handling tasks. In this guidance “a load” could also include the moving and handling of people with disabilities (who require support from others when standing or moving around) or inanimate objects. If you have any specific questions or need further guidance, contact the Health and Safety Service.

How to identify if there is a risk of injury

It is necessary to make a judgment in each case, based on evidence such as people puffing or straining to lift and carry loads, sweating, excessive fatigue, bad posture, cramped work areas, poor technique, awkward or heavy loads, carrying up or down stairs or a history of accidents / injury.

Handlers can often highlight which activities are unpopular, difficult, or simply hard work.

A simple mechanism by which the manual handling task can be assessed for potential risk of injury is through the TILE(O) process.

Task	• Does the task involve unnatural body movements such as twisting or stooping? • Is the task repetitive or require transport over long distances? • Does the task require two or more people?
Individual	• Is the individual fit with a good understanding of the required manual handling task? • Have they been trained (including the use of aids if required)? • Do they have any conditions or injuries that may limit their ability to complete the task e.g. pregnancy, injury, an enthusiastic young person with little or no training?
Load	• Is the load heavy, difficult to grip, sharp, hot, cold, or awkward to carry?

	• Is it a load that becomes heavier through repetitive actions?
Environment	• Are there environmental considerations such as confined spaces or tasks required under hot or cold conditions? • Will the objects be transported across different floor surfaces, up or down stairs, or outside where conditions may be wet, slippery, or icy?
Other	• Other considerations should be given too, such as wearing suitable clothes and footwear so that it does not limit or impede posture or movement during the activity. • Individuals may be wearing PPE which may limit or impede movement. • Do the objects require cleaning before handling?

Is this a precise technique?

With so many factors varying between jobs, people, and workplaces, it is difficult to be precise. However, following the guidelines outlined in the HSE guidance to manual handling and receiving training and guidance from a competent trainer/health and safety officer will help to help to identify whether individual techniques can be adapted to help avoid injury. If the initial TILE(O) assessment is applied and there are significant concerns, a detailed risk assessment is required to record any specific techniques or aids designed to help complete the manual handling task.

Lifting and Lowering – General Guidelines

There is no such thing as a completely ‘safe’ manual handling operation. Manual handling is an activity that we all conduct both at work and home, commonly in an instinctive manner. The guidelines outline that if the task can be avoided, that will eliminate the risk altogether. However, that isn’t always feasible, so the next stage of minimising risks is to ensure that employers and individuals fully understand the manual handling task and they receive training, guidance, and information.

A risk assessment is a useful means of recording the safe systems around the manual handling tasks. There is no need for a more detailed assessment if an individual has knowledge of the load to be lifted or lowered, understands their capability, and can apply good ergonomic techniques. A dynamic assessment (applying the TILE(O) method) can be used in that situation. Another mechanism to further eliminate or reduce the risk of personal injury is through the safe use of mechanical aids (e.g. a sack truck, flat bed trolley etc). However, this is also subject to the operator receiving appropriate training and instruction on the safe use and good technique application to minimise the risk of incident and injury.

Diagram 1:[Manual handling. Manual Handling Operations Regulations 1992. Guidance on Regulations L23 (hse.gov.uk)]

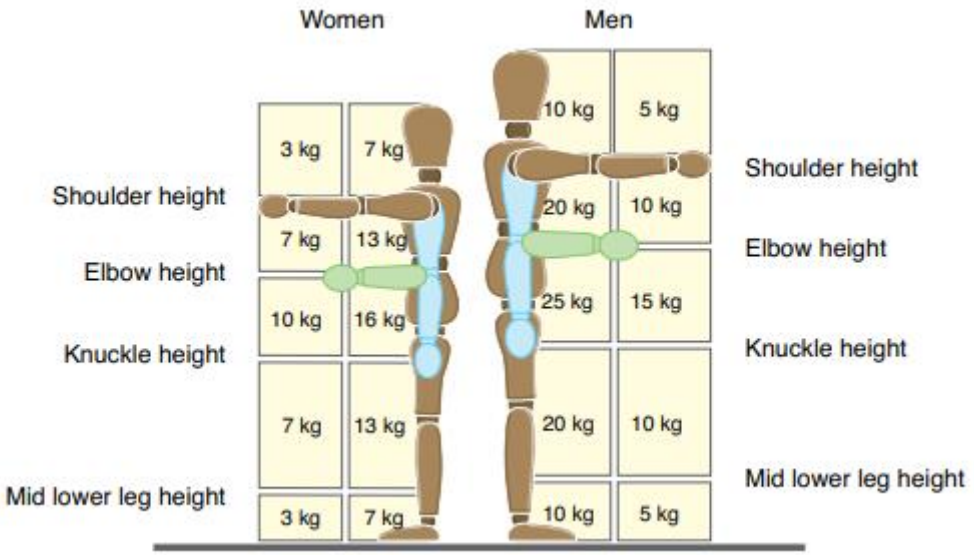
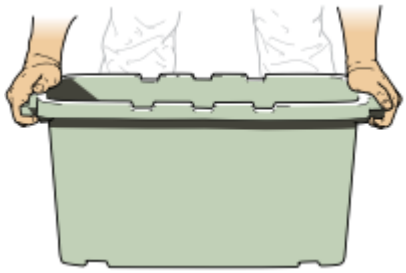


Diagram 1 above is a lifting and lowering chart designed to help identify whether a full assessment is needed for a given manual handling activity.

The diagram shows a series of ‘weight’ boxes. Each box represents a ‘body’ zone giving a recommended maximum weight when an individual seeks to lift or lower an object from different heights. Whilst some individuals may feel that they are capable of lifting or lowering weights greater than those shown, there is an increased risk of harm or injury.

Also note that where loads are lifted or lowered using extended arms, or from a high or low level, the guideline weight is significantly lower. This is because greater balance and stability is required as additional stress is placed on the back as the object is lifted or lowered, again increasing the risk of injury as a result.

The guideline weights assume that the load is readily grasped with both hands and that the operation takes place in reasonable working conditions, with the person in a stable posture.



Screening Exercise

Observe the work activity you are assessing and compare it to Diagram 2 below. Where more than one person is involved in the activity, the figures need to be amended accordingly. A person's role(s) should be checked individually if their movements warrant it.

- First, decide which box or boxes the handler's hands pass through when moving the load:
  - If the person's hands enter more than one box during the operation, use the lowest weight as the comparator.
  - Use an in-between weight if the hands are close to a boundary between boxes.

- Then, assess or measure the maximum weight being handled. If it is less than the lowest weight reached, the operation is within the guidelines unless any of the limiting factors below are applicable.

Diagram 2:

If the Handler Twists

During the operation reduce the guideline weights if the handler twists to the side during the operation:

- By 10% if twisting beyond 45 degrees
- By 20% if twisting beyond 90 degrees

If possible, encourage the handler to move their feet as opposed to twisting or stooping their body during the operation.

Frequent Lifting and Lowering

The guideline weights are for infrequent operations - up to about 30 operations per hour and:

- Where the pace of work is not forced, adequate pauses to rest and/or the use of different muscles is possible, and
- The load is not supported by the handler for any length of time.

Reduce the guideline weights if the operation is repeated more often. As a rough guide, reduce by:

- 30% if the operation is repeated once or twice per minute.
- 50% if the operation is repeated five to eight times a minute.
- 80% where the operation is repeated more than 12 times a minute.

Manual Handling involving two or more people

In some cases, manual handling tasks may require lifting and carrying that involves more than one person – known as a dual, tandem or team lift or carry. This may be required for heavy or awkward loads, or where the moving and handling of people is required. Key factors here to consider include:

- Can mechanical aids be used to eliminate/minimise the risk to individual(s)?
- Communication between those involved in the lift, carry and lower of the object or people is critical. This helps to ensure that the activity is conducted in tandem, recognising that carriers may be impeded by way of sightlines, obstacles or other people as the task is performed.
- Risks may arise where a second person is called upon unexpectedly. They may not be trained in good manual handling techniques or recognise the load in terms of its weight and distribution, poor handholds, the route to be taken, or simply a failure to understand instructions, leading to accident and injury.

Carrying – General Guidelines

What a person can carry safely is often far less than what they can lift. As a rule, if an employee is required to carry objects for more than 9 meters then the task should be assessed with a view to providing an alternative means of movement.

Carrying Between Different Levels

If a person is carrying loads between different levels e.g. up or down a staircase then one hand needs to be free in order to hold onto a banister/handrail to prevent a slip or trip. When ascending or descending a staircase staff should not rush and if possible, take a lift. Further information is available in HS25 Slips and Trips (Same level falls) Policy.

Pushing and Pulling Trolleys etc. – General Guidelines

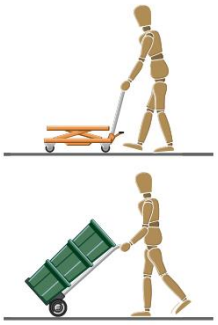
The general guidelines for pushing and pulling operations applies where a load is slid, rolled, or moved on wheels. Acceptable or low risk tasks are those where the task requires force from the hands, legs are bent slightly to generate the initial push or pull, there is no twisting of the torso,

and the individual can stand upright. The distance required to move the load without a pause, or a break is no more than approximately 20 meters. As an indicator, the amount of bodily force required to push or pull a load is:

Descriptor	Men	Women
Force required to stop or start the load	20kg	15kg
Sustained force to keep the load in motion	10kg	7kg

The HSE document 'Manual handling at work: a brief guide' (page 9) contains a push/pull risk filter that examples forces required to push or pull loads and the factors that affect them.

Where a detailed assessment is required for pushing and pulling activities, a Risk Assessment – Pushing and Pulling (RAPP) tool is available. This template is available from the HSE, or Somerset Council has its own version – F26b Pushing and Pulling loads assessment.



Using the results: Do I need to make a more detailed assessment?

If, after following the steps above, the weight of the load/ amount of force required is below the guideline figure you have settled on (bearing in mind the reduced limits for twisting and for frequent lifts) you do not need to do any more than record the findings on a risk assessment, using the templates available on The Safety Portal (Corporate) or EEC (Schools).

But you will need to make a more detailed assessment if:

- The conditions given for using the guidelines (e.g. that the load can be readily grasped with both hands unless going up or down a staircase) are not met.
- The handler has reduced capacity, e.g. through ill-health or pregnancy.
- The handling operation must take place with the hands beyond the boxes in the diagram.
- The guideline figures in the diagram are exceeded.
- The task in hand requires significant forces e.g. to push or pull the object effectively.
- There are additional factors such as slopes, uneven floors, confined spaces, or street/office furniture that provide tripping or trapping hazards.
- Where the task involves moving and handling of people, especially those that may have limited mobility or an understanding of how and when they will be moved.
- Where the task involves a dual, tandem or team lift. The risk assessment is useful way of recording safe systems and clear instructions on how the team should perform the task.

To support complex manual handling activities, the Manual Handling Assessment Chart (MAC), tool (provided by the HSE), or the F26a – Manual Handling Assessment (provided by SC) will help

you assess the most common risk factors from lifting, carrying and team handling. You may find that either tool will help identify higher risk manual handling operations and to help complete detailed risk assessments.

The MAC tool is not suitable for assessments of pushing and pulling tasks. In this case, the RAPP tool should be used especially where:

- There are extra risk factors, e.g., slopes, uneven floors, confined spaces, poor grip, low slip resistance between footwear and floor.
- The handler cannot push or pull the load whilst keeping their hands between knuckle and shoulder height.
- The load must be moved for more than about 20m without a break.
- The guideline figures in the table are likely to be exceeded.

A useful template for a full assessment complete with checklist is available at: http://www.hse.gov.uk/msd/pushpull/assessment.htm

Are you saying I must not exceed the guidelines?

No. The risk assessment guidelines are not ‘absolute limits’ for lifting (or pushing and pulling). But work outside the guidelines is likely to increase the risk of injury significantly, so you should examine it closely for possible improvements.

You should also remember that you must make the work less demanding if it is reasonably practicable to do so. Your main duty is to avoid lifting operations, where possible to either eliminate or reduce the risk a risk of injury.

Where it is not practicable to do this, you should assess each lifting operation and reduce the risk of injury to the lowest level reasonably practicable. As the risk of injury goes up you must look at the operation more closely and more regularly to make sure the assessment is still valid and that the risk of injury has been sufficiently reduced.

Training

For Corporate training, use TLC for courses on Manual Handling.

For Schools, the Blackboard virtual training platform includes a downloadable Manual Handling PowerPoint along with a quiz.

Face to face training can be arranged by contacting the Health & Safety Service email: training@somerset.gov.uk

Creating a safe lifting culture in your workplace

Along with training staff in safe lifting techniques and the risks associated with improper lifting practices, encourage employees to report unsafe lifting practices and foster a culture where everyone feels responsible for safety.

Incident and near miss reporting can give useful learning opportunities to improve safety practices. Consider putting up Manual Handling workplace safety posters in prominent locations such as staff rooms.

Other Information and Links

HS F26a Manual Handling Assessment

HS F26b Pushing & Pulling of Loads Assessment

The Manual Handling Operations Regulations 1992 (last published September 2016): L23

HSE Website: Manual Handling at Work: A brief guide (HSG 143)

HSE Website: Upper Limb Disorders in the workplace: HSG60

HSE Website: Musculoskeletal disorders

HSE - Manual handling assessment chart (MAC) tool: http://www.hse.gov.uk/msd/mac/index.htm

HSE - Doing a push/pull risk assessment: http://www.hse.gov.uk/msd/pushpull/assessment.htm

HSE - Making the best of lifting and handling aids: A brief guide

Review and Revision

This Guidance will be reviewed as it is deemed appropriate, but no less frequently than every 36 months. Policy review will be undertaken by rolling programme established by The Health and Safety Service and agreed by the Health, Safety, and Wellbeing Steering Group.

Version History

Revision Date	Author	Version	Description of Revision
09/10/2024	Pam Price	V1.0	New Guidance

References

The following Somerset Council policy documents are directly relevant to this policy, and are referenced within this document:

HS2 Responsibilities Policy

HS26 Manual Handling Policy

HS3 Reporting of Incidents Policy