

# Manual Handling - Reducing the Risks

## Level 3 Health and Safety in the Workplace

### Introduction

The last section of the course looked at the importance of undertaking a risk assessment for all of the manual handling activities in your workplace.

In this section, we'll look at the possible control measures that can be implemented in order to lift, push and pull correctly and safely. You'll also learn more about what mechanical aids are available to reduce the need for manual handling altogether.

### Topics to be Covered

The topics covered in this section are:

- Mechanical aids
- Changing the layout
- Personal protective equipment
- Lifting
- Pushing and pulling
- Training

### Mechanical Aids

To help reduce the risks associated with manual handling, you should consider using mechanical aids. You should always look at whether manual handling can be avoided through mechanisation.

This may include:

- Simple tools, such as grab hooks or suction pads.
- A simple lever to decrease the amount of bodily force needed.
- A hoist to support the weight of a load, leaving the handler free to control its position.
- A trolley, pallet truck, sack truck, wheelbarrow or roller conveyor to reduce the effort required to move a load horizontally.

Specialised mechanical aids include drum hoists, trolleys and dollies used for barrels, or airbeds and rolled tables for the fine positioning of items of machinery.

In the construction industry, chutes are a convenient way of using gravity to move loads from one place to another.

For transporting goods up a staircase, a star-wheeled sack truck can be used.

In the healthcare industry, lifting devices for the safe handling of patients are available.

When introducing mechanical aids, ensure that they don't create new hazards.

Remember that pushing or pulling a truck or trolley still constitutes as manual handling and, if the correct training on new equipment is not provided, it can create an even greater danger for workers.

All devices should be covered by a maintenance scheme and fault report system and guarding of moving parts may be required.

Lifting equipment must be regularly inspected and records kept, according to the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).

## Changing the Task, Load and Environment

Improvements in the flow and storage of products and materials will help to reduce the risk of injury to employees. Splitting the load up into smaller, lighter loads will also reduce the risk.

Where heavy items must be moved in and out of storage, the optimum position for storage is around waist height.

Design the working area so that the distance materials need to be carried is reduced, as this will improve productivity as well as reduce the risk of injury.

Reducing the need to open doors while carrying loads will make similar improvements.

## Personal Protective Equipment

Personal Protective Equipment (PPE) may be necessary in some situations. Such equipment would normally include:

- Hand protection, such as gloves or gauntlets.
- Foot protection, such as safety shoes or boots.

Once provided, the PPE must be maintained in good condition and must be replaced or repaired where necessary.

It is the duty of the employee to wear the PPE as appropriate and the duty of the employer to ensure, so far as is reasonably practicable, that the PPE is issued and worn when required.

## Lifting

The next few slides will guide you through the correct manual handling techniques that workers should follow when moving loads.

If you are planning to lift something, think about it first. First of all plan the lift: where is the load going to be placed? Will help be needed with the load?

Remove obstructions, such as discarded wrapping materials, and for a long lift consider resting the load midway on a table or bench to change grip.

Keep the load close to the body for as long as possible while lifting and keep the heaviest side of the load next to the body.

If a close approach to the load is not possible, try to slide it close to the body before attempting to lift it.

Adopt a stable position. The feet should be apart with one leg slightly forward to maintain your balance.

You should be prepared to move your feet during the lift to maintain your stability.

Avoid tight clothing or unsuitable footwear which may make this difficult.

Get a good hold, ideally with the heaviest side of the load next to your body. This may be better than gripping it tightly with hands only.

Start in a good posture. At the start of a lift, it is best to slightly squat using the back, hips and knees rather than bending over using the back only. Remember to keep your line of gravity in a vertical position.

Avoid twisting the back or leaning sideways, especially while the back is bent. Shoulders should be kept level and facing in the same direction as the hips.

Turning by moving the feet is better than twisting and lifting at the same time.

Keep the head up when handling and look ahead, not down at the load, once it is being held securely.

Move smoothly. The load should not be jerked or snatched as this can make it harder to keep control of and can increase the risk of injury.

Don't lift or handle more than can be easily managed. There is a difference between what people can lift and what they can safely lift. If in doubt, seek advice or get help.

Put down then adjust. If precise positioning of the load is necessary, put it down first, then slide it into the desired position.

## Pushing and Pulling

When pushing or pulling a load:

- The worker should try to push rather than pull when moving a load. They must be able to see over it and control steering and stopping.
- Avoid working alone when negotiating a slope or ramp.
- Keep in mind that moving an object over uneven surfaces requires greater force.
- To make it easier to push or pull, employees should keep their feet well away from the load and go no faster than walking speed.

## Handling devices

- Aids, such as barrows and trolleys, should have handles at a height between the shoulder and the waist.
- Devices should be well maintained with wheels that run smoothly.
- When purchasing new equipment, ensure it is fit for purpose.
- Consult employees on what works and what does not.

## Training

Employees should receive suitable and sufficient training to reduce the risks from manual handling. They must be made aware of the hazards and the control measures that should be used to avoid or reduce these risks.

Training should include the principles of kinetic handling, such as lifting, pushing and pulling, and should be supplemented by:

- Risk assessment information.
- Mechanical aids where possible.
- Reviewing work practices and layout.
- Avoiding unsuitable loads.
- Monitoring.
- Reassessment when necessary.

## Exercise

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Are the following statements true or false?

Mechanical aids help to reduce the risks from manual handling	<input checked="" type="radio"/> True	<input type="radio"/> False
The optimum storage position for heavy items is at head height	<input type="radio"/> True	<input checked="" type="radio"/> False
When lifting, the load should be kept close to the body	<input checked="" type="radio"/> True	<input type="radio"/> False
When carrying a load, avoid twisting the spine	<input checked="" type="radio"/> True	<input type="radio"/> False
When pushing a load, use slopes and ramps to move more quickly	<input type="radio"/> True	<input checked="" type="radio"/> False

## Summary

In this part of the course, you've learnt more about manual handling and how the risks can be reduced by using mechanical aids and following the correct manual handling techniques.

When introducing mechanical aids, ensure that they don't create new hazards. All devices should be covered by a maintenance scheme and fault report system and you should ensure that staff are fully trained in how to use all new equipment.

When lifting: remove obstructions, keep the load close to the body, adopt a stable position, get a good hold, start with a good posture, avoid twisting, keep the head up and move smoothly.

When pushing or pulling: consider using handling devices and pay attention to force, slopes, uneven surfaces, stance and pace.

Employees should receive suitable and sufficient training to reduce the risks from manual handling. They must be made aware of the hazards and the control measures that should be used to avoid or reduce these risks.