

Getting to grips with hoisting people

HSE information sheet

Health Services Information Sheet No 3

A short guide

This information sheet explains the problems associated with hoisting people and sets out guidance to deal with them. It covers fixed, mobile and overhead hoists. The advice is intended for health and social care providers or other organisations who move and handle people and will help them to comply with their legal duties.

What are the issues?

The use of hoists has become an integral part of delivering health and social care services. Although the use of hoists can reduce musculoskeletal risks, you should consider the other risks associated with hoisting people. Each year a significant number of incidents are reported in which people have been injured while being moved using hoisting equipment. Between April 2001 and December 2007 there were 163 hoisting accidents reported to the Health and Safety Executive under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). An average of 120 incidents per year are reported to the Medicines and Healthcare products Regulatory Agency (MHRA).

The degree of injury varies, depending on the vulnerability of the hoisted person, the nature and consequences of the fall and what the falling person makes contact with. Falls during hoisting have resulted in severe injuries, from broken bones through to fatalities.

What can go wrong?

People can fall during hoisting for a variety of reasons. Problems include:

- Selection of the wrong size sling – resulting in discomfort if the sling is too small and a risk of the person slipping through the sling if it is too large.*
- Selection of the wrong type of hoist or sling for the individual, or for the specific task – resulting in inadequate support and increased risk of falling

from the sling. For example, access/toileting slings give a great degree of access but very little support and their use should therefore be restricted to toileting purposes, where appropriate.*

- Incompatibility of the hoist and sling – resulting in insecure attachment between the two. For example, incorrectly attaching a loop on a sling to a spreader bar designed for a clip attachment, or attaching a clip on a sling to a spreader bar designed to take a loop attachment. Follow the manufacturer's advice and refer any concerns about sling/hoist design, supply, manufacturer's instructions or compatibility claims to the MHRA, the regulator for medical devices (www.mhra.gov.uk).
- Failure of equipment due to poor maintenance, lack of inspection, inappropriate laundering processes or as a result of inadequate repair or modification.
- Leaving a vulnerable person unattended in a hoist, or in a position where they might be at risk of falling from the bed or chair.
- Hoist overturning when manoeuvring over difficult surfaces, transporting an individual over a long distance on a hoist, or not following manufacturer's instructions for use or safe systems of work.
- Not using the safety harness/attachment (if the sling specified for the individual has one).

* Note:

Sling sizes and coding varies between manufacturers. There is a risk of using an inappropriately sized sling if you make assumptions without checking the suitability of a specific sling for the individual. For example, two large slings from different manufacturers may be different sizes – the body of the sling may be a different length or the number of loop attachments may differ, resulting in a different lifting position. Additionally, sling designs can alter over time, so a new sling from a manufacturer may differ in size or attachment strap length from one previously purchased. Some slings come with a range of different length loops for attachment to the hoist. These can be used to increase the comfort of the individual or put them in a more reclined or upright position. However, you should take great care to choose the correct loops for the individual so that they are not at risk of slipping from the sling, and to use the same loop configuration on both sides to reduce the risk of the person falling from the sling sideways.

- Instability when moving someone on a mobile hoist – resulting in them striking objects. This is likely to cause injury, especially to those with vulnerable skin, and will increase the risk of a fall or overturn. In many cases, assessment will show that two handlers are required: one to operate the hoist; the other to help steady things and, where needed, support the person's lower legs to keep them in a safe position when moving from one place to another. Importantly, they can also provide direct reassurance to the person being hoisted to maintain their co-operation and reduce the likelihood of them contributing to unstable movement.

Case example: Mrs W had been resident in a nursing home for two years. She was unable to weight bear or move independently. While being hoisted from a bath by a new care assistant who had not received training, and had not used that particular type of hoist and sling before, Mrs W slipped from the sling and fractured her shoulder. She died as a result of a subsequent pneumonia infection. The hoist and sling used required active participation of the resident and was not suitable for Mrs W, or for hoisting from a bath. Risk assessments and procedures for manual handling and bathing had, in general, not been brought to the attention of care assistants and supervision was inadequate. The company was prosecuted and fined £90 000.

What should I do?

The person

Consider whether a hoist is the most suitable handling aid and, if so, devise a handling plan to match the individual's ability and meet their needs and those of the workers involved. It should specify the appropriate hoists and slings for the individual and the type of transfers required. It should also take into account the views and preferences of the individual being hoisted. If in any doubt, seek competent advice.

The **handling plan** should cover the range of activities where a person may require assistance with moving and handling, eg transfers bed to chair, into bath etc. The plan should be easy to read and clearly state the control measures for moving and handling the individual, including:

- specific equipment needed;
- techniques to be used;
- number of handlers required;
- sling attachment loops to be used; and, where applicable
- leg configurations etc.

Examples of a patient moving and handling assessment form and safer handling plan can be found in the All Wales NHS Manual Handling Training Passport and Information Scheme:
http://www.wales.nhs.uk/documents/NHS_manual_handling_passpor.pdf

The equipment

Lifting equipment is subject to additional requirements, including a thorough examination by a competent person. Hoists and slings are medical devices and the equipment manufacturer is required to provide suitable instructions for use, including compatibility information and guidance on the checks you should carry out before each use.

The staff

Share the handling plan with all those involved to ensure that workers know how to handle each individual. They may also be able to contribute to the development of the handling plan to ensure the chosen options are workable. Make sure that staff are trained in the specific equipment and techniques so that they have the skills and competence to carry out the handling plan and understand the risks and measures to control them. The Management of Health and Safety at Work Regulations 1999 require employers to have access to competent persons who can assist them in the measures needed to comply with health and safety requirements. Employees have duties too; they should:

- follow appropriate systems of work, as identified for individuals in their handling plan, and use the equipment provided;
- co-operate with their employer and let them know of any problems; and
- take care to ensure that their activities do not put others at risk.

The lift

Before hoisting, undertake an assessment of the risks, taking account of the individual's handling plan, and put in place actions to reduce the risk of injury. Lifting operations should be properly planned and carried out in a safe manner in accordance with the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). The Workplace, Health, Safety and Welfare Regulations 1992 require those in control of workplaces to make sure that floors and traffic routes are maintained in good condition and free from obstructions, and that there is suitable lighting and ventilation in the workplace

Maintenance

Ensure there are adequate systems in place for maintenance and inspection of hoists and slings in line with the manufacturer's instructions, the Provision and Use of Work Equipment Regulations 1998 (PUWER) and LOLER. The MHRA device bulletin on managing medical devices, DB2006(05), gives some guidance on this topic.

LOLER: Where lifting equipment, including hoists and slings, is used by people at work the Lifting Operations and Lifting Equipment Regulations apply. In addition to routine maintenance and servicing, LOLER requires lifting equipment to be inspected and thoroughly examined. Thorough examination by a 'competent person' is required either at six-monthly intervals or in accordance with a written scheme of examination drawn up by a 'competent person'. A competent person is someone with the relevant technical knowledge and practical experience of lifting equipment to enable them to detect defects or weaknesses and to assess their importance in relation to the safety and continued use of the specific equipment being examined.

Monitoring

Check that handling plans are being followed, and revise and update if the needs of the individual or other factors affecting the plan change.

Training

Employers need to make sure that staff receive adequate training and information on people moving and handling. Practical training has an important role to play in ensuring that staff have the skills and confidence to hoist people safely. In addition to practising equipment selection and use, staff need to understand the principles of hoisting, the potential risks, how to use the specific equipment they have in their workplace and how to implement individual handling plans.

It is important that supervisors also receive training so that they are able to monitor, identify and correct poor practice. There is no firm rule about how often training should be given. However, skills will inevitably deteriorate over time. Provide update or refresher training periodically, or when competency assessment identifies the need for further training. You will also need to provide training when new lifting aids are introduced, or there are changes to the method of work.

Case example: An immobile, 90-year-old patient, Mrs B, suffering from dementia, had been on a rehabilitation unit for some time following a fall. She was assessed by a nurse as needing a small-sized full-body sling for all transfers in hospital. No other patients on the ward at that time required the small sling and the sling was usually found in her wardrobe. The sling had not been detailed on her moving and handling risk assessment or care plan, which simply stated 'hoist for all transfers plus two people'. When two staff, who had not been on duty for some weeks, were getting the dependent patients up and washed, they found the small sling in Mrs B's room. Mrs B protested that it wasn't the right sling and that the sling had hurt her. So, instead, they used the large full-body sling, which was draped over the hoist, to lift her from the bed to a commode. During hoisting, Mrs B slipped down through the access aperture in the sling and rapidly fell, striking her head. Mrs B died and the hospital was subsequently prosecuted and fined £20 000 plus costs for failing to ensure her safety because the correct sling size had not been communicated to staff, nor did they know how to correctly size and select a sling for this individual.

The annexes to this guidance provide safety checks and other measures for employers and those hoisting people to consider to help them ensure safe handling. Figure 1 provides a checklist for using a mobile hoist in the form of a useful flowchart.

Annex 1 Checklist to help with hoisting

The following checklist, compiled by a group of manual handling professionals, represents safe handling practice and will remind those hoisting people of points to consider to reduce the risk. The list does not aim to cover every individual circumstance and assumes that the handler has received relevant and current training in the transfers and equipment used.

Checklist

All hoisting tasks

- Read the handling plan and ensure it is current and relevant.
- Review the person's condition prior to each transfer to ensure continued suitability for hoisting and the use of the equipment.
- Ensure the person's weight does not exceed the SWL of both the hoist and sling.
- Do not use the hoist/sling unless you have had the necessary training.
- Check the correct hoist and sling specified in the handling plan are available and servicing and thorough examination are in date.
- Ensure the equipment works and is free from observable defects before starting.
- Hoists and slings must not be adapted or misused.
- Before each use, check the hoist and sling in accordance with the equipment manufacturer's guidance on inspections and pre-use checks.
- Familiarise yourself with the hoist's emergency lowering systems.
- Check there is a sufficient number of handlers to carry out the task safely in accordance with the handling plan.
- Ensure the environment is free from obstacles and the floor free of slip and trip risks.
- Ensure the support surface is ready and safe to receive the person.
- When manoeuvring the hoist into position to connect to the sling, bring the spreader bar/carry bar down slowly, holding where necessary, to avoid contact injuries with the individual.
- If there are any concerns about the equipment, task, person, environment etc, handlers must follow organisational procedures immediately.
- Communicate with everyone involved in the task at all times.
- Ensure safety and comfort of the person at all times.
- Reassure the person at all times and involve them as much as possible.
- Prior to raising, check the sling is positioned correctly and double check the sling attachments.
- Hoist the person just above the surface from which

they are being lifted to obtain sufficient clearance.

- Check attachments remain secure and the person is comfortable before proceeding further.
- If there are any problems, lower the person into a safe position and seek further advice.
- Follow manufacturer's instructions and local policies and procedures with regard to care and cleaning of the hoist.
- Place battery-powered hoists on charge, as identified in the instructions, when not in use or ensure back-up battery is charged.
- Do not leave the person unattended in a hoist.

Additional guidance for *mobile* hoists

- Avoid using the hoist to transport over distances, thresholds or different surfaces unless otherwise stated in the handling plan.
- Do **not** apply brakes during hoisting with mobile hoists (unless otherwise stated by the manufacturer and handling plan). Note: This does not apply to certain types of equipment where the brakes need to be applied, for example standaids.
- Ensure hoist legs are in the most stable position.
- Store the hoist in a safe place with boom/jib in lowest position and with brakes on when not in use.

Additional guidance for *ceiling track/overhead* hoisting systems

- The motor should be directly overhead, and make sure the lifting tape is vertical to the lift to avoid wear and tear and/or malfunction.
- Elevate the spreader bar to its highest possible position when not in use.
- Return the hoist to its docking station, where appropriate, for charging when not in use.
- Ensure the tracking and pathway is clear of obstructions.
- Be familiar with how freely the motor moves on the tracking.
- If using a portable lifting pod/motor, develop, implement and follow guidance for a safe way of transporting and attaching.
- Do not drag the pod/motor using the lifting tape as it may cause damage to the hoist.

Additional guidance for *standing* hoists

- The person must be able to consistently and reliably bear weight through their legs and have sufficient upper body muscle strength/sitting balance.
- The person must be able to co-operate and physically participate in the hoisting process.
- Some standing hoists need using with care if the person has knee problems, sensitivity or vulnerable skin on their legs.

Additional guidance for *slings*

- Ensure the sling is compatible with the hoist.
- Double check the loops/clips are attached to the spreader bar throughout the hoisting procedure.
- Use the correct loop/clip configurations as identified in the handling plan.
- Ensure the sling and attachments are not caught/stuck on any equipment when starting the lift.

Additional guidance for *bath* hoists

- Make sure staff are fully trained on the specific bath hoist and with the equipment in the bathrooms. For example, height-adjustable baths etc.
- Ensure the environment is safe. For example, floors not slippery/wet, sufficient space.
- Using bath oils, bubble bath, lotion, talc etc may make the surfaces slippery and affect the use of the equipment.
- Check the temperature of the water.
- Ensure correct fitting of lap strap (also known as safety belt/seat belt/safety harness) unless otherwise risk assessed.
- Mobile and ceiling track hoists may also be used for bathing – see mobile and ceiling track hoist guidance.

Annex 2 Equipment safety checks prior to each use

- Is the equipment as specified in the handling plan?
- Do the hoist and sling have a 'CE' mark on them?
- Is the person's weight below the SWL of both the hoist and sling?
- Are hoists and slings within LOLER thorough examination dates?
- Has the hoist been serviced in accordance with manufacturer's instructions?
- Has there been any change in the individual's circumstances since the handling plan was devised?
- Has a visual check of the equipment been carried out prior to using it?
- Is the environment ready?
- Is there sufficient space to use the hoist safely?

Hoists – mobile (electric and hydraulic), ceiling track systems, stand aid, bath

Ensure:

- the hoist is fully charged, the battery and any leads are fitted correctly;
- there are no obvious signs of damage or fluid leaks from the hoist;
- the raise/lower mechanism works and the emergency stop button is set correctly;
- the lifting tape is intact and not frayed (applies to ceiling track, certain mobile hoists);
- the castors move freely, ie free from carpet fibres/fluff etc (mobile and standing hoists); and
- the base adjustment/hoist legs move freely (mobile and standing hoists).

Slings

Ensure:

- the sling is the correct size and type for the client and is fit for purpose;
- sling and hoist are compatible;
- all labels are legible and show the SWL and unique identifier and size;
- there are no signs of fraying, tears or deterioration etc;
- all stitching is present and intact;
- the velcro (if applicable) is clean and free of fibres/fluff etc;
- the buckle (if applicable) has no signs of damage etc;
- the loops/clips have no obvious signs of damage, fraying etc; and
- it has been cleaned.

Environment

Ensure:

- the environment is prepared for the task;
- there is sufficient space and access around and under furniture to use the hoist safely;
- the floor is clear of obstacles, eg trailing cables; and
- there is a suitable and safe area to store and charge (if applicable) the hoist.

If you identify a fault with either the hoist or sling withdraw from use immediately and follow the organisation's reporting procedures.

These guidelines have been developed in conjunction with National Back Exchange (Yorkshire branch).



START THE TASK

BEFORE THE TASK	<input type="checkbox"/> Had up-to-date moving and handling training, including hoist training? <input type="checkbox"/> Feel confident to use hoist?	NO ►	DO NOT USE Check with supervisor
	▼ YES		
	<input type="checkbox"/> Current and relevant person-specific handling plan for using hoist?	NO ►	
	▼ YES		
	<input type="checkbox"/> Person's condition/ability same as when they were assessed for this equipment? <input type="checkbox"/> Do you have consent?	NO ►	
	▼ YES		
	<input type="checkbox"/> Number of handlers available as per handling plan?	NO ►	
	▼ YES		
	<input type="checkbox"/> Familiar with this specific hoist & sling?	NO ►	
	▼ YES		
	ENVIRONMENT Area safe for hoisting, ie <input type="checkbox"/> sufficient space? <input type="checkbox"/> clear of obstacles? <input type="checkbox"/> access around/under furniture? <input type="checkbox"/> clean/dry?	NO ►	
	▼ YES		
HOIST <input type="checkbox"/> Familiar with emergency stop and lowering systems?	NO ►		
▼ YES			
SLING <input type="checkbox"/> Sling compatible for use with this hoist?	NO ►		
▼ YES			
<input type="checkbox"/> Sling is one identified in handling plan and is still appropriate (ie right size and type, cross reference with care plan)?	NO ►		
▼ YES			
Visual check made of sling, ie <input type="checkbox"/> clean and undamaged? <input type="checkbox"/> label legible – SWL clearly displayed? <input type="checkbox"/> unique identifier? <input type="checkbox"/> LOLER examination/service up to date (6 monthly)?	NO ►		
▼ YES			
Visual check made of hoist, ie <input type="checkbox"/> battery charged? <input type="checkbox"/> LOLER examination/service up to date (6 monthly)? <input type="checkbox"/> no obvious signs of damage? <input type="checkbox"/> hoist moves freely on castors backwards and forwards? <input type="checkbox"/> base adjustment and lifting/lowering mechanisms move freely? <input type="checkbox"/> emergency button set in correct position? <input type="checkbox"/> SWL clearly displayed and not exceeded?	NO ►		
DURING TASK	<input type="checkbox"/> Hoist brakes OFF (unless otherwise specified in manufacturer's instructions)?	NO ►	<input type="checkbox"/> Unlock hoist brakes (unless otherwise assessed)
	▼ YES		
	<input type="checkbox"/> Sling loops/clips attached securely and correctly to hoist?	NO ►	<input type="checkbox"/> Re-attach and re-check
	▼ YES		
	<input type="checkbox"/> Sling safety harness/belt secured if there is one?	NO ►	<input type="checkbox"/> Fit as per handling plan
	▼ YES		
<input type="checkbox"/> Person looks safe and comfortable? <input type="checkbox"/> Sling smooth under person? <input type="checkbox"/> Sling leg configuration correct?	NO ►	<input type="checkbox"/> Re-fit sling	
▼ YES			
<input type="checkbox"/> Person's legs safe distance from mast?	NO ►	<input type="checkbox"/> Turn spreader bar, giving person more leg room	
▼ YES			
<input type="checkbox"/> Hoist with hoist legs widened (unless handling plan states otherwise) until straps tight <input type="checkbox"/> Recheck person is safe, comfortable and correctly positioned <input type="checkbox"/> Start full hoist			
AFTER TASK	<input type="checkbox"/> Person's position correct? <input type="checkbox"/> Are they comfortable?	NO ►	<input type="checkbox"/> Hoist again, then reposition
	▼ YES		
	<input type="checkbox"/> Detach sling from hoist <input type="checkbox"/> Remove sling (if applicable) ensuring person left in safe position		
	▼ YES		
<input type="checkbox"/> Hoist & sling suitable for next use, ie clean, undamaged?	NO ►	<input type="checkbox"/> Clean hoist and/or report damage and/or launder sling – following organisational procedures	
▼ YES			
<input type="checkbox"/> Store hoist in suitable, safe place <input type="checkbox"/> Recharge hoist (if applicable)			

Figure 1 Checklist – using a mobile hoist

Further reading

The Guide to the Handling of People – a systems approach (Sixth edition) BackCare 2011
ISBN 978 0 9530 5281 3

Back in work – Back pack 22 June 2010
www.nhsemployers.org/HealthyWorkplaces/MSDs/Pages/Backinwork-backpack.aspx

Managing medical devices DB2006(05) Medicines and Healthcare products Regulatory Agency 6 November 2006

Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk/. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

This document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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