

## Section 3 – Safe Use of Equipment

**Relates to:**

- QCF MH 203, MH 204, MH 205
- All Wales Manual Handling Passport Modules C/D/E/F

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## Safe use of equipment

The provision of appropriate equipment brings numerous benefits for carers and the individuals using it. It has capacity to increase independence, improve safety to staff, reduce the numbers of carers involved, and improve the dignity of care. However, using equipment also introduces risks, which need to be managed. The requirements of relevant legislation are listed in Section 1, including the Lifting Operations and Lifting Equipment Regulations 1998, Provision and Use of Work Regulations 1998, and the Manual Handling Operations Regulations 1992 (as amended). The following general guidelines should be followed:

- Always follow manufacturers' instructions.
- Equipment should be suitable for its purpose and safely installed.
- Equipment should not be issued without an assessment taking into account the needs of the individual, capability of carers, the environment in which it is to be used, and the equipment itself. Additional risks introduced by the equipment must be identified and managed.
- Assessments should identify all foreseeable risks, including equipment failure, and should identify control measures. These should include risks both to carers and the individual.
- Control measures should include risks to individuals where equipment is used independently.
- Specific information about using equipment should be included in care plans/handling plans.
- Equipment needs to be regularly inspected and maintained and records kept.
- Equipment should only be used by staff who have had the required level of training. This does not necessarily need to be a formal course - the training required will depend on the equipment used and the needs of those using it.

## Beds/trolleys/tables etc.

The introduction of electrically operated profiling beds has eliminated a number of high risk manual handling activities and allowed those using them independence and thus improved quality of care.

A number of manufacturers operate systems known as 'Total managed equipment' or 'Total bed management' etc. through which beds and other items of equipment are provided through special contracts. These cover a range of services that aim to ensure appropriate equipment is available when and where required and that it is properly managed, maintained, cleaned and replaced as needed. Specialist equipment can be provided within such contracts or hired from some manufacturers e.g. for bariatric use.

## Types of mechanical beds/trolleys/tables etc.

**Height adjustable beds/trolleys/tables** - there is a wide range of beds/trolleys/tables and even cots and incubators available that may be raised and lowered to suitable working heights. They may be mechanically or electrically operated. Some changing tables can be folded up against a wall when not in use and are helpful where space is limited.

**Profiling beds** - are usually height adjustable, some can be positioned at very low levels and may reduce the risk of injury where bed side rails (cot sides) are inappropriate but there is a risk of an individual falling out of bed. These beds also convert from a flat bed to raise an individual's trunk and/or legs for repositioning or to prevent them sliding down the bed. They are available with 2, 3, 4 or 5 sections and require careful selection according to the individual's ability and the profile required. They can be adjusted electrically or manually. The manual controls can be quite hard work and do not allow the individual to control the adjustment independently. There is now a range of reasonably priced profiling beds designed for use in the community.

**Standing beds** – these tilt an individual from lying into a standing position, they are relatively uncommon but may be an option to give an individual full independence.

**Tilt Tables** - these tilt an individual from lying to a standing position. They may be an appropriate alternative to a standing frame.

**Lateral turning beds** - are mechanically operated beds that may be provided for dependent individuals who have a risk of skin damage. Some have controls, which can be operated by the individual; others are automated to turn at set intervals.

**Chair beds** - can be used as beds or chairs. Some look like beds and the mattress slides forwards and bends to form a chair. Others look like a standard armchair but recline allowing a user to lie horizontally. They may be electrically or manually operated.

## Bed attachments

**Leg raisers** - are electric or battery operated devices that gently raise an individual's legs to the height of the bed to enable them to move their legs into bed independently.

**Bed levers/rails** - fix under the mattress and are kept in place by the individual's weight. They help an individual to move in and out of bed independently or with less assistance. Some are static and others move into different positions. Careful assessment is required to make sure they do not obstruct other movements.

**Bed side rails** - prevent an individual rolling out of bed. The bars collapse to allow access to and from the bed. If an individual is likely to injure themselves on these, padded covers or solid sides are available that inflate with compressed air and collapse in a few seconds to allow access.

- **Warning:** Bed side rails must only be used after a careful risk assessment has been made by a competent person. If an individual is at risk of falling out of bed it may be safer to provide a bed that can offer a very low mattress position in conjunction with a crash mat on the floor. Further guidance on safe use of bed rails can be found in Guideline F1. (Using beds/trolleys/tables etc.)

**Bed tilting unit** - can be fitted to a normal single bed to turn a user from side to side.

**Mattress/pillow variators** - are electrically operated devices that may be placed under the mattress or pillows to help an individual sit up. Careful assessment is required since the individual will be in a sitting position with his/her legs in a horizontal position. This will be uncomfortable after a short time and may lead to slipping down the bed; consequently there is a risk of pressure sores and damage to a carer who may have to move the user back up the bed.

**Rope ladders** - are inexpensive cord ladders that fix to the legs at the bottom of the bed and may assist an individual with some arm strength to sit up independently or take some of their own weight.

**Overhead (monkey) poles** - may assist some individuals to lift the top half of their body. They are particularly useful for bridging to use a bedpan or insert a sliding sheet. Some individuals also use them to sit up in bed independently. Careful assessment is required since using them may contribute to shoulder joint damage.

## Guideline F1: Using beds/trolleys/tables, etc.

**Remember - carers are twice as likely as people in most other professions to injure their backs through moving and handling activities. To help minimise these risks always consider the following guidance before using beds/trolleys/tables etc.**

<b>Self help</b>	Can the activity be avoided, i.e. could the individual move independently if a suitable bed was provided such as a profiling bed? These allow an individual to raise themselves by pressing a button and mean that carers do not have to support them and manually position backrests.
<b>Ergonomics</b>	To avoid injury, carers need sufficient space, an appropriate bed/trolley/table and perhaps other equipment too e.g. hoist. Recent advances in the design of beds and similar equipment means there is now a sufficient range of equipment to ensure that risk can be avoided, or reduced to acceptable levels, in the majority of situations, even in individuals' own homes.
<b>Communication</b>	Check how the individual wishes to be assisted and consult their handling plan. It can be intimidating standing over an individual who is in bed. Where possible raise the bed or sit beside it to communicate with the individual so that you are on a similar level.
<b>Safety</b>	Manufacturers' instructions on care and maintenance should be followed and systems set up to ensure that regular checks and maintenance are carried out as recommended. Records should be kept to show that this has been done. <b>Do not use</b> equipment if it needs repair. <b>Report</b> any unsafe equipment and ensure it is repaired as soon as possible. Ensure the individual's weight does not exceed the limit for the equipment, e.g. if 2 carers need to kneel on the bed together the combined weight of all 3 will need to be considered. Care is needed with some beds since they can tip if the weight of the carers and the individual is all at one end. If in doubt, check with a senior member of staff. Do not leave anyone who may roll off unattended or without safety sides in place.

## Pre use checks

The following checks must be made before assisting an individual on a bed/trolley/table:

- Check that you know how to use the equipment.
- Has the equipment been serviced/inspected as recommended?
- Carry out a brief check of the following: wheels, brakes, changing table surface (e.g. for fabric damage, cleanliness) mattress (e.g. in good condition and fits appropriately), raising/lowering mechanism, frame (e.g. secure, no signs of damage), attachments (e.g. secure, no damage), bed rails/safety rails (e.g. secure, no damage, fix and unlock appropriately).
- Do not use the equipment if it needs repair, and report the defect to your manager.

## Pushing and pulling beds/trolleys/tables

### Preparation (2 carers normally needed)

1. Assess the number of staff needed to move the equipment (usually 2 staff are needed for any distance and a risk assessment may indicate more are required).
2. Decide which carer will push the equipment and give instructions. The other will give assistance where necessary e.g. monitoring the individual, turning and manoeuvring.
3. Where possible raise the bed/trolley/table to a comfortable working height.

### The journey

1. Avoid pulling beds/trolleys/tables using one arm in a twisted posture.
2. Apply the safe movement principles to the pushing, pulling and turning actions.

## Moving an individual on a bed/trolley

### Preparation

1. If possible plan the route to avoid slopes and areas of restricted space.
2. Ensure that the individual is ready to be moved.
3. Assess any specific needs for equipment, e.g. drips, monitoring equipment and ensure safe attachment.
4. Ensure the individual's comfort and dignity, e.g. provide sheet/blanket/pillows.

### The journey

1. Do not rush and offer reassurance if the individual is concerned about any aspects of the journey, e.g. lifts.

### Warning:

- An elderly woman was crushed to death in the mechanism of her electric bed. Current advice is to keep beds at their lowest level and only raise them for moving and handling then lower again.

## Safe use of bed rails/safety rails

Serious, sometimes fatal, accidents have occurred due to the inappropriate use of bed rails. There is a risk of entrapment of the head or neck, which can lead to death from asphyxiation. Entrapment injuries can occur where the rails are not suitable for the particular bed, or do not fit properly. They can also occur where the rails are poorly designed, e.g. with too wide spacing between the rails. Injury can also occur as a result of individuals attempting to climb over the rails, injuring the head or limbs against the rails, or injuring themselves against broken/damaged rails. Use of additional mattresses/mattress overlays can lead to individuals rolling over the top of the rails.

Bed rails should not be used as a means of restraining an individual. They should also not be used as grab rails to aid positioning. Bed rails should only be used after very careful assessment following HSE 'Bed Rail Risk Management' guidelines (LAC 79/8); information about use of the bed rails should be included in the care plan. Assessments should be reviewed after any change in the individual's condition or the equipment used (such as where a new mattress is introduced). Carers must report any concerns about risk of injury to their manager. Where carers are involved in fitting rails following assessment, it is essential that the rail selected is suitable for the specific bed, and that manufacturer's instructions are followed. Bumpers, where used, must also be fitted in accordance with manufacturer's instructions and should not be longer than the rails themselves to prevent entrapment.

# Wheelchairs

## Main types of wheelchair

### Non powered

- Transit, needs to be pushed by an attendant
- Self propelled

### Powered (usually self controlled but may be attendant controlled)

- Electrically operated indoor chairs
- Electrically operated indoor and outdoor chairs

## Wheelchair assessment

The size and type of wheelchair selected must suit the individual using it, the environment in which it is used, and where applicable, the attendant. There have been serious and even fatal injuries due to inappropriate wheelchairs and/or accessories being used. A fatality occurred when an inappropriate wheelchair and incorrectly fitted waist belt was used (MDA SN1999 (34)). Mobility service centres provide advice and proper assessment.

## Wheelchair features and accessories

The most common wheelchair is a general purpose folding one that can be propelled either by the occupant or by an attendant. It may have:

- Removable armrests to help with sideways transfers
- Dropped backrest to give better access for giving assistance
- Zip opening backrest for rear transfers
- Retractable or removable footrests to give closer access for assisting to move
- Tipping lever for manoeuvring up and down kerbs
- Cushions - essential if sitting in a wheelchair for any length of time. Speciality cushions for pressure care are available
- Backrest extensions.
- Armrests
- Leg supports
- Trays
- Body moulds
- Single lever brake kits
- Motorised units
- Lap belts and harnesses

Chairs are available for larger than average individuals. Moulded chairs/matrix chairs are available to give postural support.

## Maintenance of wheelchairs

Serious injuries have occurred due to inadequate maintenance of wheelchairs. Manufacturer's instructions on care and maintenance must be followed and systems set up to ensure that regular checks and maintenance are carried out as required by the Provision and Use of Work Equipment Regulations 1998 (PUWER). Records should be kept to show that this has been done.

## Guideline F2: Using wheelchairs

**Remember - carers are twice as likely as people in most other professions to injure their backs through moving and handling activities. To help minimise these risks always consider the following guidance before using wheelchairs**

<b>Self help</b>	Can the activity be avoided, i.e. can the individual propel the wheelchair independently or assist with some activities, e.g. apply brakes.?
<b>Ergonomics</b>	The wheelchair should be suitable for the individual. They can be adapted for different needs. Power packs may be used to assist propulsion but add weight and affect stability. Seek manufacturer's guidance on these. Choose routes that minimise hazardous handling e.g. dropped kerbs and steep slopes. Consider the design of a car if regularly transporting wheelchairs.
<b>Communication</b>	Check how the individual wishes to be assisted and consult their handling plan. It can be very frightening if a wheelchair is moved without the individual expecting it therefore continually explain what you are going to do. When possible sit beside the individual or lower to their level so that you have good eye contact when communicating with them.
<b>Safety</b>	Many injuries, some of which have been fatal, have occurred when using wheelchairs. Risk assessments should identify hazards both to individuals and carers associated with wheelchair use. Follow manufacturer's instructions on care and maintenance. Systems should be set up and records kept to ensure that this happens as recommended. Take care when pushing an individual in a wheelchair since the combined weight of the chair and the individual in it represents a significant load. Added to this the chair may have to be pushed over a variety of different surfaces both indoors and out and sometimes up or down gradients. Never lift the wheelchair using removable parts, e.g. armrests. Wear appropriate clothing and non slip footwear. Where carers need to move an electric wheelchair, e.g. positioning it for the individual, it must first be put on manual control in accordance with manufacturer's instructions.

## Pre use checks

The following safety checks should be made before using a wheelchair:

- Check that you know how the chair operates.
- Check frame and armrests are secure and not damaged, and that removable armrests remove/refit easily.
- Check the fabric (backrest and seat) to ensure it is not damaged.
- Check the cushion is available.
- Check the brakes are functioning.
- Check tyres are inflated and in good condition (poorly inflated tyres can cause brakes to fail, reduce comfort for the individual, and make the chair more difficult to push).
- Check the hand grips are secure and undamaged.
- Check the footplates are in place, are not damaged and that the latch is working.



- Check the handrim is undamaged.
  - Check any other attachments.
  - Check the wheelchair is clean.
  - Check the individual does not exceed the weight limit for the chair.
  - Check that any other attachments required by the individual are to hand.
- Any faults must be reported to a manager so that repair can be arranged, and the wheelchair should not be used.

## Pushing an individual in a wheelchair

### Preparation

1. Carry out the pre-use equipment checks described above.
2. Assess if you need assistance, e.g. to open doors.
3. Check that the environment is safe, e.g. clear and free from obstruction.
4. Ensure that the individual is safe and well enough to travel in a wheelchair.
5. Do not carry bags etc on the handles, unless an approved manufacturer's accessory.

### Transferring in/out of a wheelchair

1. Determine how the individual wishes to be assisted where possible.
2. Apply the brakes whenever an individual transfers to or from a wheelchair.
3. Before assisting an individual to transfer into a wheelchair, check it is fully unfolded and locked in the open position.
4. Put the footrests in an upright position and swing back whenever an individual transfers to or from a wheelchair. Remove armrests and backrests where appropriate.
5. Assist the individual to or from the wheelchair using appropriate equipment where necessary, e.g. hoist, transfer board. (See Guideline E1 (Assisting an individual to transfer from one seat to another2)).
6. Put the foot rests into the flat position and ask or assist the individual to position their feet on them.
7. Check the position of the individual's arms and legs once seated and remember some may have reduced or absent limb sensation.
8. Ensure the individual's comfort and dignity, e.g. cover legs, shoulders.
9. Fasten any lap belts or harnesses as appropriate.
10. Ensure any attachments are positioned appropriately, e.g. catheter.

### The journey

1. Apply the principles taught during training for pushing, pulling and turning. This will help to protect you from injury and ensure a more comfortable journey for the individual.
2. Continually explain what you are going to do. Offer reassurance if the individual is concerned about any aspect of the journey, e.g. steps, lifts. Do not rush.
3. Use ramps to avoid kerbs if possible. In the absence of a ramp it is usually possible to negotiate the kerb but check that manoeuvring a wheelchair in this way is within your physical capability. If in doubt check with your manager/supervisor. Never risk the safety of the individual or yourself.

### Kerbs and Steps

If it is safe for you to handle a wheelchair up a kerb, approach it squarely without actually touching it then:

1. Place one foot on the tipping lever and take a secure hold on the handgrips. Carefully lever the chair back until it is balanced on its rear wheels (See Fig 1).



Fig: 1



Fig: 2

2. Push the wheelchair forwards until the front castors are on the pavement and the rear ones are touching the kerb (See Fig 2). Using the safe movement principles push the chair up and over the kerb. **Do not lift the chair up the kerb.** Never lift the rear wheels off the ground as this will cause the front castors to twist sideways and may result in the chair slipping back off the kerb. If the chair is self propelling and the user is able to help, assistance can be given by pushing forwards on the hand rims.
3. To take a wheelchair down a kerb use a ramp if one is available. Where a ramp is not available, assistance may be given in lowering down over a kerb. Most individuals prefer to reverse down a kerb, although this requires the carer to take care in ensuring the safety of the individual from traffic when in the road. The wheelchair should be turned and reversed so that the rear wheels are level with the kerb edge. When there is a suitable break in the traffic, roll the rear wheels down the kerb, and draw the chair back so that the front wheels are level with the kerb. Then, using the tipper bar, lever the chair back carefully until it is on its back wheels; then pull the chair back so that the front wheels are clear of the kerb. Use the tipper bar again to gently lower the front wheels down. It is also possible to descend a kerb with the wheelchair facing forward, but it is generally not recommended as it encourages the carer to take the full weight of the chair as it lowers to the ground.

## Warning

- Do not push an individual in a wheelchair without footrest in place.
- Do not attempt to lift an individual in a wheelchair.
- Do not tip powered wheelchairs or those without tipper bars e.g. to go up/down kerbs.

## Transferring in and out of a car

### Preparation

1. Park the car on as flat a road as possible with sufficient room to allow access to/from the wheelchair.
2. Pass/position any equipment that the individual may require to assist with the transfer.
3. Position the wheelchair as appropriate for the individual and apply the brakes. It may be helpful to wind the car window down to provide a support.
4. Ensure that the individual is safe and in a comfortable position.

## Warning

1. Due to the restricted space in a car it is very difficult to provide manual assistance to someone who is transferring to/from a wheelchair into a car seat.

An individual may be able to move independently, if the wheelchair seat and car seat are level, by using a transfer board which allows a sliding transfer in three or four small stages (See Fig 3).

Fabric turntables are available to fit on car seats to assist with positioning.

Other equipment which can ease car transfers includes removable handles which can be attached to the car lock or door during transfers (see Figs 4, 5 and 6).

2. Where independent transfers are not possible a hoist should be used or other means of transport considered.



Fig: 3



Fig: 4



Fig: 5



Fig: 6

## Lifting wheelchairs in and out of a car

### Preparation (more than 1 carer may be needed)

1. Assess if 1 or 2 carers are needed and if 2 who will give the instructions.
2. Protect the paintwork on the rim of the car boot with an old rug or blanket.
3. Remove any attachments to make the wheelchair as light as possible.
4. Move the wheelchair close to the car and fold it into its compact state.
5. Stand as close to the wheelchair as possible.
6. Make sure you are balanced with your leading foot pointing in the direction in which you will be moving.
7. Using the principles taught for safer moving and handling, lower to the level of the wheelchair and grasp it close to your body (See Fig 7).



Fig: 7



Fig: 8



Fig: 9

8. Lift it to the rim of the boot and allow it to slide forwards onto the floor of the boot. If the rim is high the wheelchair can be balanced on this then lowered into the car. A blanket over the rim will protect the car body (Figs 8 and 9).
9. To remove the wheelchair, reverse the actions.  
n.b. Lifting wheelchairs in and out of cars is much less of a hazard with estate cars and some hatchbacks. Equipment is available to aid lifting wheelchairs into cars (such as wheelchair bags, and the Mangar BackSaver).

## Assisting an individual with an electric wheelchair

1. Carry out pre-use checks to ensure that the chair looks in good general condition.
2. Operating instructions should be followed.
3. Bags etc. should not be placed on the handles or in the area of the controls. The only exceptions are bags which are a manufacturer's accessory.
4. Fit supports/straps as appropriate and check the individual's feet are on the footrests.
5. Where carers need to move an electric wheelchair, e.g. to bring it to the individual, it must first be put on manual control, in accordance with manufacturer's instructions.
6. The chair should also be put in manual mode before assisting with personal care/assisting the individual to transfer to avoid inadvertently activating the controls.

## Minibus transport

**The following guidelines should be followed when assisting an individual using a wheelchair onto minibus transport:**

1. Carry out pre-use checks to ensure that the chair looks in good general condition. It is particularly important to check the tyres are correctly inflated: fatalities have occurred where badly maintained wheelchairs have fallen from tail lifts because of flat tyres and resulting brake failure.
2. It is preferable for wheelchair users to transfer to a seat, where they can.
3. Where individuals need to travel in the wheelchair itself, this should ideally be with the wheelchair facing forward, using appropriate restraints/clamps applied following manufacturer's instructions.
4. Clamping chairs/applying restraints can involve postural problems. The vehicle should be configured in such a way that space is maximised; runs should be scheduled and planned to reduce to a minimum the postural and space difficulties.
5. Knee protection may be used when kneeling postures need to be taken to apply clamps.
6. The organisational procedure should be followed for loading/unloading wheelchairs, including use of tail lifts.

# Hoists

The use of hoists can significantly reduce the risk of musculoskeletal injury to carers and given that an appropriate hoist and sling is selected it should provide a safe and comfortable means to move an individual who cannot bear their own weight or use sliding techniques.

Each year however a number of incidents occur where individuals are injured whilst being hoisted. Injuries vary depending on the vulnerability of the person and nature of the incident but falls have resulted in broken bones and even fatalities.

## What can go wrong

**Falls from hoists can occur for many reasons including:**

- The wrong size of sling is used
- The wrong type of hoist or sling is used
- The sling and hoist are incompatible
- There has been poor maintenance/lack of inspection
- A person is left unattended
- The hoist overturns when being manoeuvred over difficult surfaces
- Manufacturer's instructions are not followed
- Harnesses/attachments are not used as specified

**Other injuries which may occur include:**

- Entrapment of feet
- Bruising/cuts due to parts of the body hitting the hoist
- Friction damage to the skin due to incorrect fitting/removing of slings

**Skill is required to ensure that a person is moved in comfort and that their dignity is respected.**

## Types of hoist

**Fixed hoists** - a number of types are available e.g. bath hoists fit on an external pillar with a chair that can be swung over the bath and into the water. Others give access to swimming pools, activities such as riding or attach to cars. If used in bathrooms be aware that bath oils/bubble bath etc can make the surfaces slippery. Ensure the correct fitting of lap straps/belts/harnesses where appropriate.

**Overhead hoists** - are less obtrusive than the other types and are often used where there is too little space to use a mobile hoist. They also avoid some of the hurdles encountered with mobile hoists such as difficulty pushing over carpets, storage etc. They can be ceiling mounted or gantry systems, which can be wheeled or fixed.

The motor should be directly overhead when using this type of hoist and the lifting tape vertical to avoid wear and tear or malfunction. Some hoists need to be returned to a docking station for charging when not in use and the spreader bar should be raised to the highest position after use. Follow manufacturer's guidance for moving portable motors.

**Mobile hoists** - there are many different mobile hoists available. Larger hoists are more suitable for settings such as residential units where there is space to manoeuvre and store them. Smaller hoists are more useful where space is limited such as private houses. Both types have similar features and may be manually or battery operated.

Mobile hoists should not be used to transport individuals over distances and difficult surfaces such as threshold bars, unless specified in a handling plan. Do **not** apply brakes during hoisting unless specifically stated by the manufacturer or handling plan. Ensure the base is in the most stable position before hoisting. Store safely with the boom lowered and brakes on.

**Standing hoists** - are mobile hoists specifically designed to assist an individual with poor or unreliable standing ability to stand for transfers and toileting. Careful assessment is required when using these since the slings of some standing hoists may not suit those with weak or painful shoulders and individuals with confusion could slip through them. The individual must be able to consistently and reliably bear some weight through their legs, have upper body muscle strength and sitting balance. They must also be able to cooperate with you. Some standing hoists have removable toilet seats with commode pans.

## Care and maintenance of hoists

- Hoists require 6 monthly checks to comply with the Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 and must be inspected and serviced, maintained and cared for according to manufacturer's instructions.
- Routines should be established and records kept to ensure this happens (see pages 57 and 58 for inspection records).
- If the power fails use the manual override system. If there is no override system follow the organisation's guidelines, which should include procedures for hoist failure.

## Slings

There are a variety of slings available for use with the different types of hoists. They are a key factor in the level of comfort during a transfer. In some situations it is possible to use one manufacturer's sling with another manufacturer's hoist **but this should only be done after a thorough written risk assessment carried out by a competent assessor e.g. the manufacturer, an occupational therapist.**

It is important to note that there are two distinct styles of sling attachment:

1. The **'loop'** style sling which is designed to be used with the 'coat hanger' spreader bar system.
2. The **'clip'** style sling that is designed to be used with the 'Y' or 'tilting' frame spreader bar.

The size and style of the sling will depend on the individual's size, weight and condition and guidance will be required from an occupational therapist or other competent person to determine which type of hoist and sling will be appropriate.

**It is important to attach the sling loops/clips as specified in the handling plan and to double check that they are properly attached to the spreader bar before commencing the lift and throughout the procedure.**

## Sling labels

Sling labels provide a lot of useful information, e.g.

- A description of the sling
- Washing instructions
- Safe working load limit
- Safety notice
- Size
- Date of manufacture
- Unique identification number for traceability

Sling labels must be legible to comply with the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). If a label cannot be read perhaps because it has faded in the wash the sling should not be used. Most slings can be washed at 95 degrees but lower temperatures are required for some fabrics. **Servicing label** - in addition to the information label many manufacturers now attach a servicing label to slings which should be marked or notched after the 6 monthly LOLER test. If the sling is condemned for any reason this label should be cut through and the reason recorded in the service log book.

## General care of slings

- Wash regularly according to manufacturer's instructions and be aware that, generally, biological detergents are not recommended and that drying instructions vary.
- Store in a safe place, do not leave on the floor for reasons of hygiene and to avoid them becoming slipping/tripping hazards.
- Always fasten Velcro together to avoid it collecting debris and becoming less effective
- Slings should be checked as part of the 6-monthly LOLER check; slings should have an individual identification number to ensure that they have been checked.
- Where there is a risk of cross-infection (for example where slings are used to assist to the toilet), slings should not be shared. The organisational policy should be followed.
- Slings may become damaged over time, e.g. through the tapes/fabric getting caught in parts of a wheelchair or just general deterioration, therefore they must be checked before each use. It is a good idea to carry out visual and manual checks since fabric stiffness, crushed webbing, thinning fabric cannot always be seen. It is good practice to document sling inspections.

### How to visually check a sling:

- Lay the sling on a flat surface with the label facing you
- Check the label can clearly be read
- Start at the top right corner and check all tapes individually ensuring there is no damage and all stitching is intact
- Check the stitching that attaches the tapes to the sling, pay particular attention to the boxes since continual hoisting can cause weakness at these points
- Check all tapes and attachments for signs of deterioration
- Check the main fabric for holes, tears or thinning of material
- Check for staining (staining from urine/medication can weaken the fabric)
- Check the binding is in place and not worn or sharp at the edges
- Check that Velcro is in good condition

**If you find a problem with any part of the sling you must remove it from use immediately and inform your manager/supervisor.**



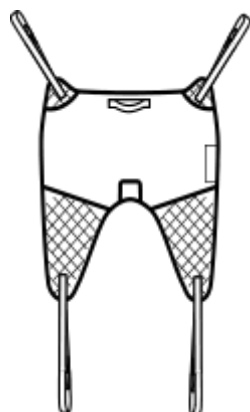
## Types of sling

There are many different slings available in different styles, sizes and fabrics including polyester, mesh and parasilk type material. Most can be modified by the addition of:

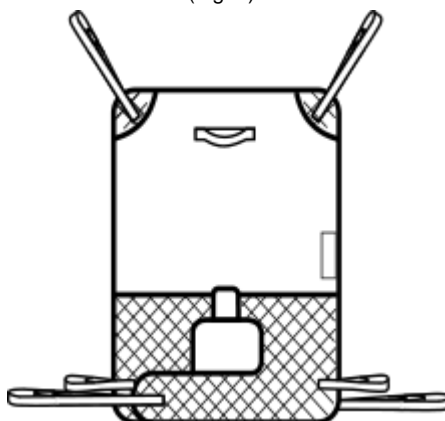
- Linings, e.g. towelling, fleece
- Quilting
- Head supports, e.g. padded, boned, quilted, shaped
- Neck roll
- Knee pillow
- Hip tapes
- Removable stays
- Arm restraints
- Chest straps

Manufacturers have different, but often similar, names e.g. quickfit/ easyfit and most use a colour coding system of coloured bindings or handles for quick identification of size. Whilst colours are gradually becoming standardised there are still variations so it is always advisable to check which colours represent which size. Sizes also vary from different manufacturers so a large from one company maybe a different length from another. The most commonly used slings are described below:

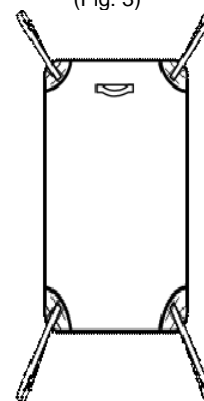
Quick fit/Easyfit/Universal  
(Fig: 1)



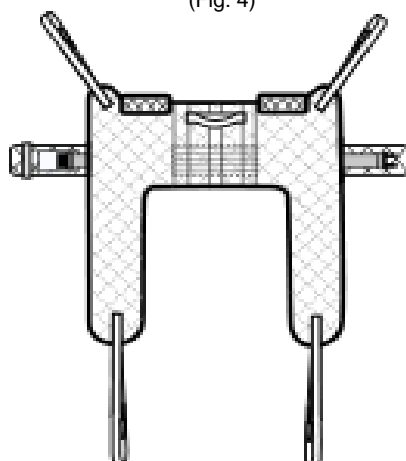
Quickfit deluxe  
(Fig: 2)



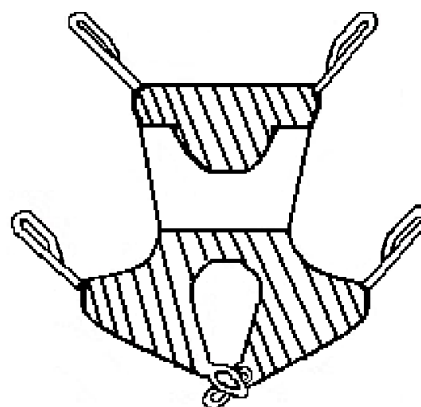
Hammock/Long seat  
(Fig: 3)



Dressing/toilet  
(Fig: 4)



Continental easy access  
(Fig: 5)



## **Quickfit/Easyfit/Universal slings (Fig: 1)**

This is the most popular style of sling on the market because it is relatively easy to fit and can be used in different ways, e.g. between the legs or in a hammock position as follows:

- The leg straps can go under both legs forming a seat that keeps the legs together. This tends to be more comfortable and dignified but it can squash the legs together.
- A strap can be positioned under each leg separately and then crossed before being attached to the spreader bar
- A strap can be positioned under each leg separately but not crossed. This is less dignified but gives more access when carrying out toilet transfers.

This sling may cause discomfort to the hips and legs due to the way the fabric is pulled by the hoist and it is not able to cope with movement or spasm.

## **Quickfit/Fastfit deluxe slings (Fig: 2)**

Usually more comfortable and versatile than the ordinary quickfit although the extra tapes mean it is more complex for carers to fit. It gives good support in the thigh and hip area and can also be used as a divided leg or hammock sling as above.

## **Hammock/Long seat slings (Fig: 3)**

This design has been used for many years when an individual needs to be transferred with their legs together. It offers a less bulky sling for the individual who needs to have a sling in situ all day provided that an all day material is used. A waist support may be added for an active individual and it is possible to have a commode aperture. A disadvantage is that this type of sling can only be fitted when an individual is lying on a bed/changing table, etc.

## **Dressing/Toileting slings (Fig: 4)**

These slings are widely used for convenience when assisting an individual with dressing or toileting however they must be used with caution. The individual needs reasonable upper body strength otherwise the sling may slip and place considerable pressure under the arms resulting in a drag lift. The sling can only be fitted when an individual is sitting (if in bed they need to be on a profiling bed which is raised to sitting position before the sling is fitted). The sling needs to be a good fit and fitted quite low. As the sling takes the individual's weight their body thins out and the waist clip will need to be re-tightened. They are available with or without underarm padded rolls for additional comfort.

## **Continental easy access slings (Fig: 5)**

A relatively recently developed style of sling which is more shaped and therefore less bulky than some and easier to fit in many situations. Because it is an easy glide fabric it is easier to introduce and retrieve which can be especially helpful for larger people.

## **Rigid high back slings**

Another fairly recent development are slings with a rigid back, another improvement especially for larger individuals since the fabric they are made from allows them to be easily introduced and retrieved and the design can help to reduce pressure on the back of the knees and shoulder areas.

## **Walking slings**

Provide support for people to stand, walk or dress by means of a harness that supports the chest and upper trunk, some also have leg straps. These are particularly useful for rehabilitation and where there is a known risk of falling. Neoprene Harness Slings have great flexibility and allow the body to be supported without restriction.

## Stretcher slings

These slings are available for some hoists when an individual needs to be lifted whilst lying flat. There are different systems including fabric slings, rigid scoop, series of bands that pass under an individual and attach to a frame. Not all of these lift from the floor.

## Custom made slings

Slings can be tailor made for individuals with certain medical conditions, or to fit a particular seat. Some firms will personalise slings for children, e.g. print a picture of a pop group, football club on the sling.

**Disposable slings** - are for specific use by one individual, e.g. where infection control may be an issue. They are as strong as other slings but are designed to be disposed of when soiled or no longer needed by that individual.

## Leaving slings in situ

Generally, slings should be removed following transfers. In some instances applying and removing slings is extremely difficult (for example with some moulded seating) and can cause discomfort for individuals and strain for carers. Specialist slings are available, manufactured in fine, breathable fabrics, which may be left in place. However, as there is a risk of pressure sores resulting from sitting on the fabric, potential problems with temperature regulation and also because sitting on slings may compromise the postural support integral to some seating, these slings should only be used following very careful assessment that includes therapists and tissue viability nurses.

## Incompatibility of slings and hoists

Slings may have loop or clip types of attachment. Fitting a clip to hoist designed for loops or vice versa will result in an insecure attachment. Therefore do not mix slings and hoists from different manufacturers unless the manufacturer or an occupational therapist has clearly recorded that it is safe to do so. HSE guidance recommends that manufacturer's instructions are followed and any concerns about sling/hoist design, supply or compatibility claims are referred to the MHRA, the regulator for medical devices. ([www.mhra.gov.uk](http://www.mhra.gov.uk))

## Guideline F3: Using hoists

**Remember – carers are twice as likely as people in most other professions to injure their backs through handling and moving activities. To help minimise these risks always consider the following guidance before using hoists**

<b>Self help</b>	Can the activity be avoided, i.e. can the individual assist with some of the activities? Individuals may not be able to stand but may be able to roll, position legs, etc. Do not hoist someone unnecessarily, some individuals may require it some days and not others.
<b>Ergonomics</b>	Hoists and slings should be suitable for the individual's needs, the environment in which they will be used and the carer using them. Slings can be tailor made for individuals with particular needs.
<b>Communication</b>	Check how the individual wishes to be assisted and follow instructions in their handling plan. Hoisting can be frightening for those not used to it. Some may find it reassuring if hand contact is maintained during hoisting. Try to find a position where you can maintain good eye contact with the individual. Ensure colleagues are aware of instructions specified in the handling plan.
<b>Safety</b>	Follow manufacturer's instructions for care and maintenance of hoists and slings. Systems should be set up and records kept to ensure that this happens. Do not use a hoist if you notice any faults and report them to your manager/supervisor. Follow manufacturer's instructions for operating the hoist, e.g. the application of brakes (brakes often do not need to be applied but there are exceptions). Do not mix hoists and slings from different manufacturers without authorisation. Do not exceed the safe working load of the hoist or sling. Take care when applying or removing the sling to protect the individual's skin from friction. Remember a hoist is for transferring, not transporting an individual, if they need to travel a distance it is safer, and more dignified, to use a wheelchair. Be aware of your posture, it is easy to stoop and twist when using a hoist.

## Pre use checks

Before using hoists and slings a visual check should be carried out to ensure:

- The 6 monthly inspection is up to date (even if one day late, the HSE advises the hoist should not be used)
- The wheels, brakes and base adjuster are functioning correctly
- The mast is secure
- There is no visible damage to handles, spreader bar
- The raising and lowering mechanism and emergency lowering mechanisms are functioning correctly. If not, follow guidance below 'Dealing with hoist failure'.
- The battery is charged. If the battery indicator is on red or the warning bleep sounds do not use the hoist until the battery is recharged.
- Slings are clean, and fabric, loops, binding, Velcro and stitching are in good order, with no fraying or other damage
- The instructions on the label are clearly visible
- If you suspect equipment may be faulty or potentially dangerous do not use it and seek guidance from your manager

## Preparation (usually 2 carers needed)

1. Check the individual's care plan for specific instructions. This should include:
  - Size and style of sling to use. (Remember that there is a risk that individuals can fall from slings which are too large).
  - Type of hoist to use
  - Method of applying and removing the sling
  - Number of carers required to carry out the activity
  - How to attach the sling to the spreader bar i.e. appropriate loop length
2. Identify the carers needed and plan the manoeuvre with them and the individual. Decide who will give instructions and delegate responsibilities as appropriate.
3. If a mobile hoist is to be used ensure that there is adequate space to manoeuvre and operate it, and if necessary move furniture, obstacles, etc.
4. Ensure that any equipment to be used in conjunction with the hoist is positioned and prepared as appropriate.
5. Select the appropriate style and size of sling for the individual.
6. Position the hoist within easy reach away from the individual's line of vision if possible.

## Fitting a sling with an individual lying in bed or on the floor

There are 4 methods for fitting a sling when an individual is lying in bed or on the floor:

- **Method 1 - Fitting a sling by rolling an individual**
- **Method 2 - Fitting a sling using slide sheets**
- **Method 3 - Fitting a sling by rolling an individual to one side**
- **Method 4 - Fitting a sling with the individual supported by the backrest**

## Method 1- Fitting a sling by rolling an individual

1. If possible adjust the bed to a comfortable working height.
2. Ask or assist the individual to roll onto one side (see Guideline D3. Assisting an individual to roll or turn).
3. Concertina half the sling lengthways and place it in the appropriate position close to the individual and tuck the folded section underneath them and lay the other half flat on the bed. Alternatively place the sling over the individual and tuck as much as possible under the shoulder and hip the individual is lying on. Ease out creases during positioning.
4. Ask or assist the individual to roll onto their back and unfold the remainder of the sling. Provided that care has been taken to position the sling correctly the remainder should be easy to unfold without rolling the individual onto their other side and they should be in the centre of the sling. If this is not the case ask or assist them to roll again and position the sling correctly (see Fig: 1).



Fig: 1

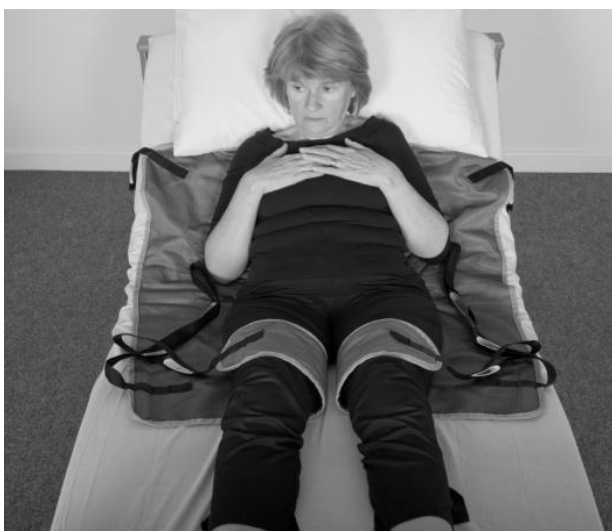


Fig: 2

## Warning

It is important to follow the instructions specifying the type, style and size of sling to be used in the individual's handling plan, and the method of fitting, where there is a choice (see Figs: 2, 3, 4).



Fig: 3

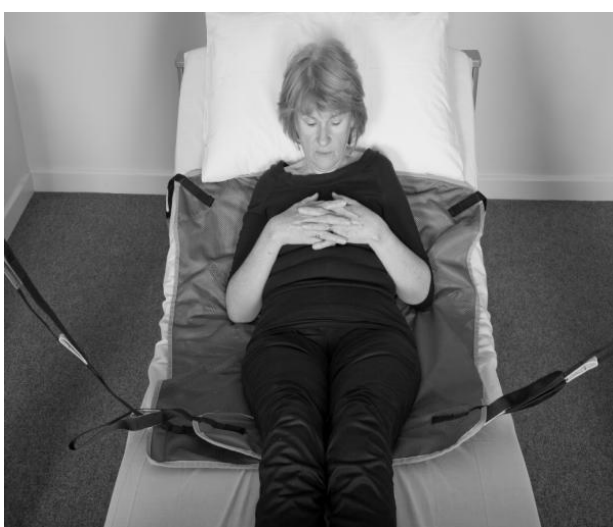


Fig: 4

## Method 2 - Fitting a sling using slide sheets

1. Select a pair of slide sheets that are large enough to allow the sling to be fed between them under the individual.
2. Fold the sheets together. (The folds should be approximately 15 cm (6 inches) wide. Do not concertina the sheets since this makes them difficult to unroll under the individual).
3. If possible adjust the bed to a comfortable working height.
4. Decide whether the sheets will be unrolled from the individual's head or feet. (Unrolling from the head is usually easier but some individuals may prefer them introduced from their feet).
5. The carers stand on opposite sides of the bed and one carer slides the folded sheets under the pillow or individual's feet to the other. The sheets should lie across the bed with the roll in contact with the bed and positioned so it will unroll under the individual (Fig 5).



Fig: 5

6. Both carers then adopt an oblique position and hold the top of the sheets firmly with one hand and use the other to unroll the folded section. One carer needs to give clear instructions so that they undo each fold together. If the roll gets stuck one carer may gently ease the individual a little towards them whilst the other frees it.
7. When the sheets are unrolled and flat under the individual position the sling between the layers of the sheet and gently slide it down to an appropriate position (Fig 6).



Fig: 6

8. Remove the top sliding sheet by tucking a corner underneath and gently pulling it through so that the fabric is sliding against itself and not the individual (Fig 7).



Fig: 7

9. To remove a sling using this method, place one slide sheet on the bed prior to lowering the individual. After detaching the loops, introduce a single slide sheet on top of the sling following the instruction in steps 5 and 6.

## Method 3 - Fitting a sling by rolling an individual one way

1. If possible adjust the bed to a comfortable working height.
2. Ask or assist the individual to roll onto one side (see Guideline D3 Assisting an individual to roll or turn).
3. Fold the sling in half lengthways with the label on the outside, and introduce it centrally, behind the individual's back.
4. Take the uppermost leg piece and fold it upwards, tucking the end of the piece behind the pillow, underneath the individual's head.
5. Roll the uppermost half of the sling, including the folded leg piece, towards the individual.
6. Gently tuck the sling fabric under the individual's back, taking care to avoid contact between fingertips and the individual's back.
7. Ask or assist the individual to roll back onto their back.
8. Taking hold of the leg piece tucked behind the pillow, draw it downwards, to unfold the remaining side of the sling.
9. Position the sling under the individual's thigh according to manufacturer's instructions. Ease out creases as you do this.



## Method 4 - Fitting a sling with the individual supported by the backrest

1. If possible adjust the bed to a comfortable working height.
2. Using the profiling mechanism, assist the individual into a sitting position, the knee break may be raised a little to aid comfort.
3. Ask the individual to lean forward slightly; alternatively one carer can ease the individual forward using palmer holds. If the individual has poor sitting balance and cannot easily be assisted to lean forward, select one of the above methods.
4. Ease the sling down behind the individual's back till the edge is level with the base of the spine.
5. Bring forward and position the leg pieces, taking care to smooth out any creases.

## Fitting a sling when an individual is sitting

There are two main ways to fit a sling when an individual is sitting on a chair or bed.

- **Method 1 - Fitting a sling without using slide sheets**
- **Method 2 - Fitting a sling using slide sheets**

## Method 1 - Fitting a sling without using slide sheets

1. Ask or assist the individual to lean forward slightly and place the sling behind their back. Ensure that it reaches down enough to be in the appropriate position (i.e. level with the base of the spine) and that it is central with the shoulder loops in the correct position. Where the individual cannot maintain this position, one carer should offer support, while the other introduces the sling (Fig 8).



Fig: 8



Fig: 9

2. Move to the front of the individual and kneel on the floor to position the sling under the individual's thigh according to manufacturer's instructions (Fig 9). Ask or assist the individual to ease their weight from side to side to assist with positioning the leg pieces. Avoid lifting the leg while at the same time dealing with the leg pieces of the sling. If necessary a footrest may be used to support the legs; some individuals may be able to assist using a leg lifter. Removing the arm of the wheelchair may also improve access when bringing forward leg pieces, though care should be taken to ensure the individual is adequately supported. Ease out creases during positioning.

## Method 2 - Fitting a sling using slide sheets

1. Place two single slide sheets together and position them around the individual like a cape. Ensure that they reach down to the seat and wrap round the individual's sides.
2. Gently ease the sling between the slide sheets ensuring that it is manoeuvred into the correct position.
3. Move to the front of the individual and kneel on the floor.
4. Position the sling under the individual's thigh according to manufacturer's instructions. Ask or assist the individual to ease their weight from side to side to assist positioning the leg pieces. If necessary the slide sheet can be used to position the leg pieces and a footrest used to support the legs. Ease out creases during positioning.

## Hoisting from bed to chair

1. Ensure that the sling is in the correct position.
2. Position any other equipment required as appropriate e.g. slide sheet to reduce friction under the individual's heels, chair/commode.
3. If necessary adjust the base of the hoist to fit around the mechanism of the bed.
4. Guide the hoist slowly and carefully close to the individual with the spreader bar located over their centre of gravity. A mobile hoist may be positioned square to the individual or at an oblique angle according to the space available.
5. Attach the sling to the spreader bar according to manufacturer's instructions, and check that it is secure. Where looped slings are used check the loops are selected in accordance with the instructions in the care/handling plan.
6. Raise the hoist. If the sling does not have a head support it will be necessary to provide support for the individual's head during the initial part of the lift.
7. Guide the sling and steady the individual, assist their legs off the bed and ensure that their legs, feet and head do not come into contact with the hoist or other furniture. Check the individual has been raised clear of the equipment they will transfer to.
8. Manoeuvre the hoist slowly and smoothly so that the individual does not swing unduly. Take care to apply the principles taught during training for pushing/pulling/turning.
9. Constantly observe the individual and keep transportation in the hoist to a minimum.
10. Lower the individual over the chair, control the descent and gently guide the sling to avoid any part of the individual's body coming into contact with the hoist. Gentle pressure on the knees or using the handles on the sling may help with positioning. If the individual is being lowered into a wheelchair that has a tipper bar it may be easier to tip the wheelchair slightly backward to achieve a good sitting position. This can only be done with this type of wheelchair. Commodes, chairs and other types of wheelchair are not safe to be tilted in this way.
11. Check that the individual is in the correct position. **If not re hoist.** When in a suitable position take the tension off the sling, unhook it and move the hoist out of the way.
12. Remove the sling.
13. Store the hoist safely according to manufacturer's instructions.

## Hoisting from chair to bed

1. Ensure that the sling is in the correct position.
2. Position any other equipment required as appropriate e.g. slide sheet to reduce friction under the individual's heel; adjust height and profile of the bed.
3. If necessary adjust the base of the hoist to fit around the seat the individual is using.

4. Guide the hoist slowly and carefully close to the individual with the spreader bar positioned at chest level so that it cannot catch the individual's head. A mobile hoist may be positioned square to the individual or at an oblique angle according to the space available.
5. Attach the sling to the spreader bar according to manufacturer's instructions and check that it is secure. Where looped slings are used check the loops are selected in accordance with the instructions in the care /handling plan.
6. Raise the hoist (Fig 10). Guide the sling and steady the individual, assist their legs off the bed and ensure that their legs, feet and head do not come into contact with the hoist or other furniture (Fig 11).



Fig 10



Fig 11

7. Manoeuvre the hoist slowly and smoothly so that the individual does not swing unduly. Take care to apply the principles taught during training for pushing/pulling/turning. Constantly observe the individual and ensure transportation in the hoist is kept to the minimum.
8. Check the individual has been raised clear of the bed that they will be transferred to.



Fig: 12

9. Position the individual's legs on the bed, control the descent and gently guide the sling to ensure the individual is in an appropriate position on the bed. Gentle pressure on the knees or using the handles on the sling may help with positioning (Fig 12).
10. Check that the individual is in the correct position. **If not re hoist.** When the individual is in a suitable position take the tension off the sling, unhook it and move the hoist out of the way.
11. Remove the sling.
12. Store the hoist safely according to manufacturer's instructions.

## Hoisting from chair to chair

1. Ensure that the sling is in the correct position.
2. Place the other chair in an appropriate position to ensure safety and minimise transportation in the hoist.
3. If necessary adjust the base of the hoist to fit around the seat the individual is on.
4. Guide the hoist slowly and carefully close to the individual with the spreader bar positioned at chest level so that it cannot catch the individual's head. A mobile hoist may be positioned square to the individual or at an oblique angle according to the space available.
5. Attach the sling to the spreader bar according to manufacturer's instructions and check that it is secure.
6. Raise the hoist. Constantly observe the individual, guide the sling and steady the individual to ensure that their legs, feet and head do not come into contact with the hoist or other furniture. Manoeuvre the hoist slowly and smoothly so that the individual does not swing unduly. Take care to apply the principles taught during training for pushing/pulling/turning.
7. Check the individual has been raised clear of the chair they will be transferred to.
8. Lower the individual over the chair, control the descent and gently guide the sling to avoid any part of the individual's body coming into contact with the hoist. Gentle pressure on the knees or using the handles on the sling may help with positioning. If the individual is being lowered into a wheelchair that has a tipper bar it may be easier to tip the wheelchair slightly backwards to achieve a good sitting position. This can only be done with this type of wheelchair. Commodes, chairs and other types of wheelchair are not safe to be tilted (Fig: 13).






Fig: 13

9. Check that the individual is in the correct position. **If not re hoist.** When the individual is in a suitable position take the tension off the sling, unhook it and move the hoist out of the way.
10. Remove the sling.
11. Store the hoist safely according to manufacturer's instructions.



# Hoisting from the floor

## Several carers may be needed

1. Ensure that the sling is in the correct position and that the individual is comfortable, e.g. supported with pillows.
  2. Position any other equipment required as appropriate, e.g. slide sheet to reduce friction under the individual's heels, wheelchair, bed.
  3. If necessary adjust the base of the hoist to a suitable position.
  4. Guide the hoist slowly and carefully until the spreader bar is located over the individual's centre. If necessary pad metal parts with pillows/towels. According to the space available and type of hoist being used. A mobile hoist may be positioned to the back, side or front of the individual (Figs 14, 15 and 16).
- 
- Fig: 14
- 
- Fig: 15
- 
- Fig: 16
5. Attach the sling to the spreader bar according to manufacturer's instructions and check that it is secure.
  6. Raise the hoist. If the sling does not have head support it will be necessary to provide this during the initial part of the lift. Check for any discomfort as you proceed.
  7. When sufficient height is achieved bring in a wheelchair or move the hoist to a bed or chair. Guide the sling and steady the individual ensuring that their legs, feet and head do not come into contact with the hoist or other furniture. If the hoist needs to be manoeuvred move it slowly and smoothly so that the individual does not swing unduly. Take care to apply the principles taught during training for pushing/pulling/turning.
  8. Constantly observe the individual and ensure transportation in the hoist is minimised.
  9. Lower the individual, control the descent and gently guide the sling to avoid any part of the individual's body coming into contact with the hoist. Gentle pressure on the knees or using the handles on the sling may help with positioning. If the individual is being lowered into a wheelchair that has a tipper bar it may be easier to tip the wheelchair slightly backward to achieve a good sitting position. This can only be done with this type of wheelchair. Commodes, chairs and other types of wheelchair are not safe to be tilted.
  10. Check that the individual is in the correct position. **If not re hoist.** When the individual is in a suitable position take the tension off the sling, unhook it and move the hoist away.
  11. Remove the sling.
  12. Store the hoist safely according to manufacturer's instructions.

## Warning

- Not all mobile hoists will pick up from the floor. However, side suspenders may be used to increase the lowering range of the hoist.

## Turning using a hoist

If a hoist is used to transfer an individual into bed it can also be used to turn them onto their side:

1. Transfer the individual in the usual way so that they are lying on their back but only unhook the side of the sling furthest from the hoist and tuck it well under the individual.
2. Unhook the connected part of the sling to turn the spreader bar parallel to the individual.
3. Reconnect the sling and raise the hoist slightly to roll the individual.  
Slide sheets/positioning sheets designed to be used in conjunction with hoists, e.g. Repo sheet, Romedic turn sheets may also be used to aid turning.

### Warning

- Protect the far side of the bed to prevent the individual accidentally rolling out.
- This method will not work with certain slings e.g. toilet/access slings.

## Using a standing hoist

1. Ensure the sling is in the correct position.
2. If necessary adjust the base of the hoist to fit around the seat the individual is on.
3. Guide the hoist slowly and carefully close to the individual.
4. Ask or assist the individual to raise their feet onto the platform.
5. Manoeuvre the hoist forward so that the individual's knees are comfortably positioned against the knee support.
6. Engage the brakes if the manufacturer's instructions indicate to do so. Fasten leg straps if used.
7. Attach the sling to the sling attachment according to manufacturer's instructions and check that it is secure.
8. Ask the individual to hold onto the padded lifting arms of the hoist and lean back into the sling or belt (Fig 17)
9. Some manufacturers recommend releasing the brakes at this point so the hoist can move as the individual is raised.
10. Raise the hoist and carry out procedures as appropriate e.g. lower to another seat, remove or replace clothing for toileting, carry out personal hygiene.
11. Constantly observe the individual to ensure their comfort and dignity. If the hoist needs to be manoeuvred do this slowly and smoothly so that the individual does not swing unduly. Take care to apply the principles taught during training for pushing/pulling/turning.



Fig: 17

12. Lower the individual and check that they are in the correct position. **If not re hoist.** When the individual is in a suitable position take the tension off the sling, unhook it and move the hoist out of the way.
13. Remove the sling.
14. Store the hoist safely according to manufacturer's instructions.

## Dealing with hoist failure

Normal practice should be to not lift any higher than necessary to achieve the transfer, so that any incidences of hoist failure can be dealt with more easily.

Carers should also be sure that they know how the emergency lowering mechanism operates before using the hoist. A number of systems can be found on hoists, e.g.

- a lowering button
- a pin hole into which a pin or equivalent can be inserted
- a gravity assisted mechanical device on the actuator
- a mechanical turning device, and a winch system

If the hoist fails to lift or lower, first carry out the following simple checks:

- Has the emergency switch been activated?
- Is the battery present and charged?
- Is the hand control plugged in?
- Has the hoist reached its maximum/minimum height?

If you have carried out these checks and the hoist is still not able to lower, the following steps should be taken:

1. Activate the electric lowering mechanism.
2. If this fails or is not available, operate the mechanical mechanism.
3. If this fails or is not available consider whether a height adjustable surface can be introduced, such as a changing table, bed, riser chair, and raised to the level where it is taking an individual's weight.
4. If this is not possible, introduce cushions and pillows to the wheelchair to support the individual.
5. Under no circumstances cut the loops or lift the individual.
6. Complete an incident form.

## Moving and handling in emergency/high risk situations

Fortunately emergencies where people have to be moved immediately from danger without equipment are extremely rare. There are, however, situations in care work where emergencies are likely and there should be procedures in place to deal with these, e.g. people collapsing. Even though the likelihood of fire or other events requiring evacuation from buildings is rare there must be plans in place to ensure staff safety, as far as reasonably practicable, during these events.

Whilst it is not possible to cover all eventualities, many emergency situations are foreseeable and can therefore be planned for so that risks to staff, including manual handling injuries, can be minimised.

It is the manager's responsibility to plan for emergencies and record procedures for employees (and others when necessary, e.g. volunteers). The written procedures should be made readily available to all concerned. They should clearly set out the limits of any action to be taken by employees (volunteers, etc.) and include arrangements for emergency evacuation. This may be to remove people to behind fire doors, into another zone, or out of the building. The safety of staff and patients/service users is paramount throughout any emergency but it must be remembered that physically moving people is strenuous and potentially hazardous and therefore even in emergencies should be kept to a minimum. Opportunities to practise procedures should be provided as appropriate e.g. fire drills. Staff unsure of emergency procedures should check them with their manager.

Procedures needed will depend on the nature of the service provided and may include some or all of the following:

- Fire evacuation
- What to do when an individual is falling
- Assisting an individual who has fallen and cannot get up
- Assisting an individual stuck in a confined space
- Failure of mechanical equipment
- Assisting an individual who cannot get out of the bath
- Ensuring the safety of someone who sits on the floor and refuses to get up (perhaps outside, maybe on a road)

If any of the above situations apply to you, or you can think of likely situations not covered, and are unsure of the procedures to follow you must check this with your manager or request a risk assessment without delay. Remember if you are involved in work in the community, in another organisation's premises, outings, holidays, etc, to check that you are familiar with the emergency procedures that cover these situations.



## Safe use of equipment questionnaire

### Which of the following apply to using profiling beds?

1. Provision and Use of Work Equipment Regulations 1998	
2. Control of Substances Hazardous to Health Regulations 2002	
3. Lifting Operations and Lifting Equipment Regulations 1998	

### List 3 changes that make the continued use of bed rails dangerous:

1	
2	
3	

### Which of the following are true? (✓ all you think are true)

1. Brakes should not normally be applied when lifting an individual in a hoist	
2. Two carers should always be allocated when using a hoist	
3. Hoists should be serviced every six months	
4. Safety rails ('cot sides') can be a safe way of preventing falls out of bed	
5. Profiling beds should be left on the lowest setting following care activities	
6. You must have attended a training course before using equipment	

### List 3 of your responsibilities when using equipment:

1	
2	
3	

### All slings may be used with any make of hoist:

True	
False	

### List 3 safety checks you should make before using a sling:

1	
2	
3	

**Identify 3 safety checks you must make before using a hoist:**

1	
2	
3	

**Which part of a hoist does a sling loop attach to?**  
 (✓ the correct answer)

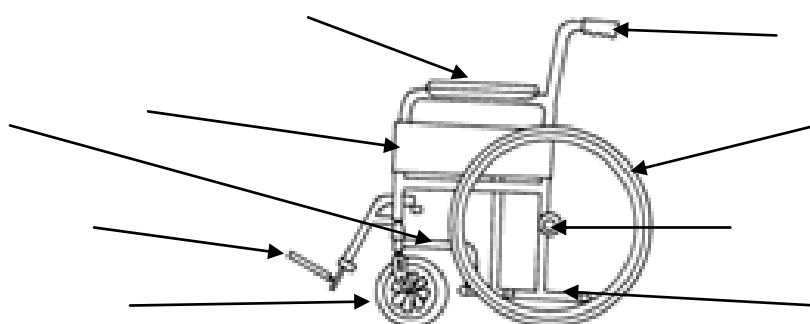
Boom	
Spreader bar	
Mast	

**List 3 situations when you should not use a hoist:**

1	
2	
3	

**List 3 safety precautions when assisting an individual in a wheelchair:**

1	
2	
3	

**Name the parts of the wheelchair**

**List 3 ways in which you can protect the dignity and comfort of an individual when assisting them in a wheelchair:**

1	
2	
3	



## Further reading

- Backcare in collaboration with the Royal College of Nursing and National Back Exchange (2011) The Handling of People 6th Ed London: RCN
- HSE (2002) Handling homecare: Achieving, safe, efficient and positive outcomes for care workers and clients HSG225
- Lifting Operations and Lifting Equipment Regulations 1998 Approved Code of Practice HSE Books ISBN 0 7176 1628 2
- Manual Handling Operations Regulations 1992, Guidance on Regulations. HSE
- Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice. HSE Books ISBN 9780953058211

## Useful web sites

- Back Care (National charity) [www.backcare.org](http://www.backcare.org)
- Disable Living Foundation [www.dlf.org.uk](http://www.dlf.org.uk)
- Health and Safety Executive [www.hse.gov.uk](http://www.hse.gov.uk)
- MHRA Medicines and Healthcare products Regulatory Agency [www.mhra.gov.uk](http://www.mhra.gov.uk)
- National Back Exchange [www.nationalbackexchange.org](http://www.nationalbackexchange.org)
- All Wales Manual Handling Training Passport and Information Scheme  
<http://www.wales.nhs.uk/documents/NHSmanualhandlingpasspor.pdf>