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# **Manual Handling – Level 2**

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## Aims and Intended Learning Outcomes

### The learner will:

- Be able to recognise manual handling risk factors and how injuries can occur
- Understand employers and employee's responsibilities under relevant national Health & Safety legislation including most recent versions of the Manual Handling Operation Regulations
- Understand their own responsibilities under local organisational policies for Moving and Handling
- Know where additional advice and information can be sought relating to Moving and Handling issues
- Be able to use an ergonomic approach to manual handling and other work tasks leading to improved working posture
- Understand principles of good back care to promote general musculo-skeletal health
- Understand the principles of safer handling
- Know the factors to be included in undertaking a dynamic risk assessment prior to undertaking a moving and handling activity
- Understand how the organisation uses its risk management processes to inform safe systems of work
- Be able to choose suitable risk control strategies, resources and support available to facilitate good practice following a risk assessment appropriate to the staff member's role.
- Know how to provide patients with the best quality care using appropriate, safe and dignified moving and handling strategies
- Understand normal human movement patterns as a prerequisite to moving and handling people
- Understand how multidisciplinary team communication and risk assessments ensure the safe handling of patients.

Staff involved as part of their duties in the moving and handling of patients will require principle-based practical instruction on strategies and approaches for safely moving and handling patients, relevant to their role in the organisation:

- Chair moves and transfers
- Bed/trolley/table moves and transfers
- Mobility
- Managing the falling/fallen patient
- Use of equipment available within the organisation, e.g. profiling beds, patient hoists and slings, bathing aids, sliding and transferring systems, small handling aids to promote independence.

## What is Manual Handling

The Manual Handling Operations Regulations defines manual handling as 'any transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or by bodily force'.

“Load” is anything, which is moveable, e.g. inanimate object, person or animal.

## Health and Safety at Work etc. Act 1974

The Health and Safety at Work etc. Act 1974 (also referred to as HSWA, the HSW Act, the 1974 Act or HASAWA) is the primary piece of legislation covering occupational health and safety in Great Britain.

The Health and Safety Executive, with local authorities (and other enforcing authorities) is responsible for enforcing the Act and many other Acts and Statutory Instruments relevant to the working environment.

This Act is designed to improve the health, safety and welfare of all employees whilst at work and to protect anyone else who could be affected by the actions or omissions of employees or the employer.

The Health and Safety at Work Act etc. 1974 poses a duty on both the employer and the employee.

### Section 2 – Employer’s Duties:

The Act imposes a duty on every employer that they “shall ensure, so far as is reasonably practicable, the health, safety and welfare at work of all employees.”

#### Further duties include:

- Provision and maintenance of equipment
- Provide policies and procedures
- Provision of information, instruction, training and supervision of employees
- Maintaining a safe workplace, entry and exit
- Maintaining a safe and healthy working environment

### Section 7 – Employee’s Duties:

Employees have a general duty to take reasonable care of themselves, and of others who may be affected by their acts and omissions at work.

#### They have a responsibility to:

- Receive training
- To work safely
- To use equipment
- To exercise the right to refuse to carry out a task if there is no “safe system of work” in place.
- To follow the policies and procedures of the organisation

It is the employee's responsibility to familiarise themselves with the organisation's Manual Handling policies and procedures and to speak to their line manager if they have any concerns. Employee's can contact the Manual Handling Risk Assessment Manger within their organisation for further advice and support.

### Section 37 and 40 – Negligence:

Where an employer is found negligent, the line manager or his equivalent is also liable and can be punished accordingly.

If a person is accused of negligence for failure to comply with health and safety legislation they must prove that it was not reasonably practicable to have complied.

Failure to comply with this Act may result in criminal prosecution.

## Manual Handling Operations Regulations 1992 (MHOR 1992, revised 2002).

The Manual Handling Operations Regulations 1992 were a result of the "Manual Handling of Loads – European Directive" of May 1990. A European Directive is a legal document, which means that each member state is obliged to introduce legislation to comply with the main aims of the directive. The intention is to standardise and harmonise practice throughout the European Union.

### Regulation 2 – Definitions:

"Manual handling operations" means any transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or bodily force.

"Load" is anything, which is moveable, e.g. inanimate object, person or animal.

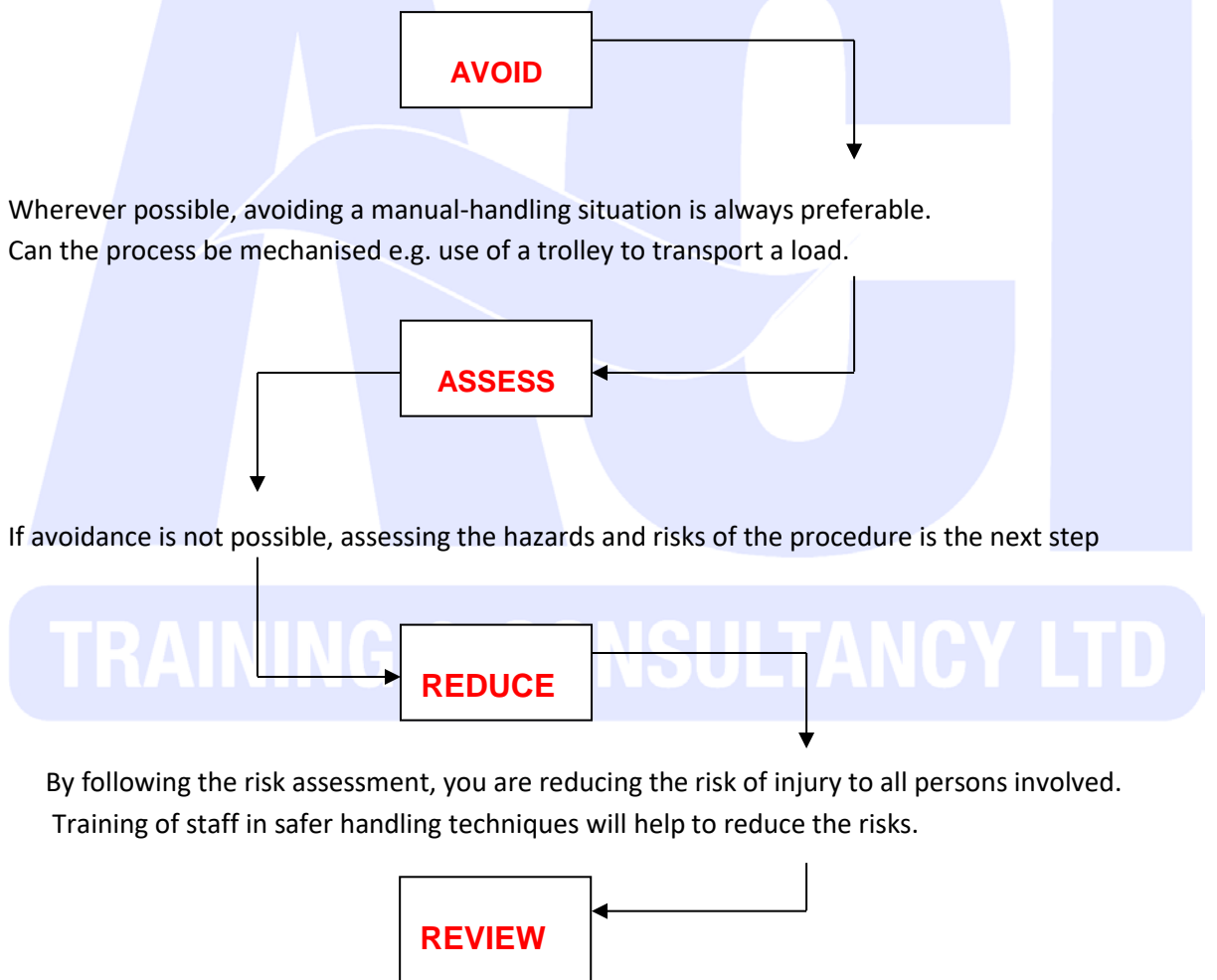
### The regulation imposes duties on:

#### Regulation 4 – the Employer:

1. So far as is reasonably practicable, **avoid** the need for his employees to undertake any manual handling operations at work, which involve a risk of their being injured.
2. Where it is not reasonably practicable to avoid the need for his employees to undertake any manual handling at work which involves a risk of their being injured:
  - i. Make a suitable and sufficient **assessment** of all such manual handling operations to be undertaken by them, having regard to the factors which are specified.... and considering the questions which are specified...
  - ii. Take appropriate steps to **reduce** the risk of injury to those employees arising out of their understanding any such manual handling operations to the lowest level reasonably practicable.

- iii. Take appropriate steps to provide any of those employees who are undertaking any such manual handling operations with general indications and, where it is reasonably practicable to do so, precise information on –
  1. The weight of the load, and
  2. The heaviest side of any load whose centre of gravity is not positioned centrally.
  
- 3. Any assessment referred to shall be reviewed by the employer who made it if:
  1. There is reason to suspect that it is no longer valid, or
  2. There has been significant change in the manual handling operations to which it relates;

And where as a result of any such **review** changes to an assessment are required, the relevant employer shall make them.



Wherever possible, avoiding a manual-handling situation is always preferable.  
 Can the process be mechanised e.g. use of a trolley to transport a load.

If avoidance is not possible, assessing the hazards and risks of the procedure is the next step

By following the risk assessment, you are reducing the risk of injury to all persons involved.  
 Training of staff in safer handling techniques will help to reduce the risks.

Risk assessments should be reviewed regularly to monitor their effectiveness.

### Regulation 5 – the Employee:

Each employee while at work shall make full and proper use of any system of work provided for his use by his employer in compliance with Regulation 4.

### The self-employed:

Any duty imposed by these Regulations on an employer in respect of his employees shall also be imposed on a self-employed person in respect of himself.

### Factors to consider when undertaking a risk assessment:

**Regulation 4** of the “**Manual Handling Operations Regulations 1992**” requires employers to make a suitable and sufficient assessment of any hazardous operations that cannot be avoided, also these assessments should be reviewed if they are no longer valid or there has been a significant change in practice. The assessment requires an ergonomic approach to be adopted.

Ergonomics is the “science of work” and can be described as “fitting the job to the person, rather than the person to the job.” The ergonomic approach looks at manual handling as a whole, taking into account the following factors:

The nature of the **TASK**, the **LOAD**, the working **ENVIRONMENT**, the **INDIVIDUAL CAPABILITY** and the **EQUIPMENT**.

## Management of Health and Safety at Work Regulations 1999 (MHSAW 1999, Revised 2003)

A range of new responsibilities for all employers is set out in these regulations.

### Regulation 9 – Risk Assessment

Every employer shall make a suitable and sufficient assessment of all hazards for, and risks to, his employees and others possibly affected by their actions. Specific risk assessments should be in place for young persons (i.e. under eighteen years of age) at work and new or expectant mothers (i.e. employees who are pregnant, who have given birth within the previous six months, or who are breast-feeding).

A hazard is something that may cause injury, while the risk is the likelihood, high, medium or low, that the hazard will be realised. People other than employees who may also be affected include, clients, bank or agency staff, volunteers, contractors and students on placements. Employees must be made aware of the risks and appropriate measures implemented to reduce the risk of injury.

Employers need to make a written record of any significant findings of the assessment. Significant findings are those that indicate that a dangerous practice exists with the potential of being a “high risk” to employees or others. To defend against compensation claims, however, it is always better to have recorded even the least serious risk assessments.

Assessments need to be reviewed regularly and, where necessary, the outcome of a risk assessment modified if it is no longer valid or there has been a significant change in the work process.

### The Risk Assessment Process

A risk assessment considers the probability of an incident occurring and the severity of the injury or damage that may occur. Undertaking risk assessments and acting upon the recommendations made should provide a safer system of work. The five steps undertaken when making a risk assessment are:

- Look at the hazards
- Decide who may be harmed and how
- Evaluate the risks and decide whether the existing precautions are adequate or whether more should be done
- Record the findings
- Review the assessment and revise it if necessary.

**HAZARD** is anything that can cause harm

**RISK** is the likelihood, high or low, that somebody or something will be injured or damaged should that hazard be realised.

#### Decide who might be harmed and how

In most handling procedures, the client and the carer are both at risk of injury. The added vulnerability of certain client groups needs to be considered, for example, confused clients, clients with sensory impairments, the anxious client etc. Then the added vulnerability of certain staff also needs to be considered, for example, young carers under 18 years old, inexperienced staff, new and expectant mothers, staff with a history of previous injuries or ill health etc.

#### Evaluate the risks

The aim is to reduce the risks associated with manual handling activities to the lowest level reasonably practicable. For example:

- Re-organise work activities
- Offer manual handling training and assess levels of competence
- Appropriate handling aids should be available
- Back care advice should be given to staff.

When significant risks have been reduced to the point that the residual risk is tolerable then efforts should be concentrated on maintenance of that safe system of work and re-assessing when new hazards occur.

#### Recording Findings

Risk assessments need to be “retrievable”. The best way to do this is by using a risk assessment form. It should be simple and easy to follow and should give the risk assessor the flexibility to think for him

or herself. It should not be time consuming to complete, but it should give a full picture of the situation. The completed form should be available to all staff undertaking manual handling activities.

### **Review Risk Assessment and revise if necessary**

Risk assessments should be reviewed on a regular basis. How regularly will depend on the condition of the client – more simply they should be reviewed when changes occur.

### **Monitoring Progress**

Managers should undertake an overall review of the effectiveness of risk assessments on a regular basis. Monitoring can be done by:

- Analysing incident, accident and sickness statistics
- Observing staff at work
- Consulting with staff
- Examining completed risk assessment forms
- Talking to clients about the care that they receive
- Talking to relatives about the care the client receives.

### **Regulation 6 – Competent Person**

Each employer shall “appoint one or more competent persons to assist him in undertaking the measures he need to take to comply with the requirements and prohibitions imposed upon him.”

The regulations go on to state “a person shall be regarded as competent where he has sufficient training and experience of knowledge and other qualities to enable him properly to assist in the undertaking ...”. Therefore, expertise does not solely depend upon qualifications. A person with the necessary knowledge and experience may be found within the organisations and could be deemed competent under this definition.

### **Regulation 11 – Health and Safety Training**

“Every employer shall ensure that his employees are provided with adequate health and safety training –

1. On being recruited...and
2. On their being exposed to new or increased risks.

The training shall –

1. Be repeated periodically where appropriate;
2. Be adapted to take into account new risks;
3. Take place within work hours.”

### **Regulation 12 – Duties of Employees**

Each employee shall take care of his or her own health and safety. This includes using the equipment in accordance with any training and instructions they have received. They must report if they consider the situation presents immediate danger or adequate protective arrangements are not in place.



## Lifting Operations and Lifting Equipment Regulations, 1998 (LOLER 1998 revised 2002)

These regulations apply to the use of lifting equipment in all sectors of industry and in all work activities. These regulations complement the MHOR, 1992 and PUWER, 1998.

### Is the equipment used for Lifting?

One way to identify this is to apply the test of primary purpose or principal function. Hoists and bath hoists would be lifting equipment, but height adjustable beds or electric riser chairs would not be.

### Is the equipment being used for work?

The Health and Safety Executive considers that equipment is being used at work if it is primarily provided for employees to use. E.g. lifting equipment provided for use in a client's own home would be covered by LOLER if employees use it, but not covered if it only used by relatives and friends etc.

The HSE believes that even in an establishment such as a residential care home, equipment such as stair lifts, bath raisers or toilet raiser seats, which are used only by residents, should not be considered to be equipment for work. It should be noted here that LOLER, 1998, covers not just employers but also persons who have control, to any extent, of lifting equipment used at work, so it is arguable regulations would apply, for instance, to a local authority that provides and maintains lifting equipment used by employees of a care agency.

### Regulation 9 – Examination and Inspection

Employers must ensure that “lifting equipment which is exposed conditions causing deterioration which is liable to result in dangerous situations” is:

1. Thoroughly examined –
  - a. In the case of lifting equipment for lifting persons or an accessory for lifting, at least every six months;
  - b. In the case of other lifting equipment, at least every twelve months; or
  - c. In either case, in accordance with an examination scheme; and
  - d. Each time that exceptional circumstances which are liable to jeopardise the safety of the lifting equipment, have occurred; and
2. If appropriate for the purpose, is inspected by a competent person at suitable intervals between thorough examinations.

### Regulation 9 – Training and Planning of Lifting Operations

Employers must ensure that every lifting operation involving lifting equipment is “properly planned by a competent person, appropriately supervised and carried out in a safe manner.”

The person planning the operation should have adequate practical and theoretical knowledge and experience. The plan will need to address the risks identified in the risk assessment and identify

resources required, the procedures and the responsibilities. All employees must have adequate training and instructions for use, so that they are able to ensure that the lifting equipment is safe to use. E.g. pre-use checks, checks on a day-to-day basis to detect wear and tear and malfunction. This overlaps with PUWER 1998

**N.B Thorough** examination should be undertaken by a competent person. Any defects must be reported. Records of examinations should be kept for inspection purposes. The competent person is defined as having sufficient training and experience or knowledge and other qualities to enable him to properly assist in the undertaking.

## Provision and Use of Work Equipment Regulations 1998 (PUWER 1998) revised 2002

These regulations cover all equipment used at work, including Manual Handling and lifting equipment.

They impose a range of duties concerning matters such as employers providing suitable work equipment.

**Regulation 4:** "Every employer shall ensure that work equipment is used only for operations for which and under conditions for which it is suitable." Suitability means: "suitability in any respect which it is reasonably foreseeable will affect the health or safety of any person."

They also impose duties on the employers providing information, instruction and training for people who use work equipment.

**Regulation 8:** "Every employer shall ensure that all persons who use work equipment (or supervise the use of) have available to them adequate health and safety information and, where appropriate, written instructions pertaining to the use of the work equipment."

**Regulation 9:** "Every employer shall ensure that all persons who use work equipment (or supervise the use of) have received adequate training for purposes of health and safety; including training in the methods which may be adopted when using the work equipment, any risks which such use may entail and precautions to be taken."

Equipment should also be maintained in good repair and regularly inspected with records of the inspection kept.

**Regulation 3:** "Every employer shall ensure that work equipment is maintained in an efficient state, in efficient working order and in good repair. ...(And) shall ensure that where any machinery has a maintenance log, the log is kept up to date."

## Equality Act 2010

The Equality Act 2010 replaces the existing anti-discrimination laws with one single act.

**Definition of Disability** – a disabled person is someone with a “physical or mental impairment, which has substantial and long term adverse effect on his ability to carry out normal day-to-day activities.”

**Employment Provisions** – the general position is that it is unlawful for an employer to ask any job applicant about their health or disability unless and until the applicant has been offered the job. An employer cannot refer an applicant to an occupational health practitioner or ask the applicant to fill in a questionnaire before a job offer has been made. Questions about sickness are classed as questions relating to health or disability and must not be asked.

There are certain specific situations in which health or disability questions are allowed to be asked during the early stages of the recruitment process.

1. To establish whether the applicant can take part in an assessment to determine their suitability for the job.
2. To determine whether any reasonable adjustments need to be made to ensure a disabled person to participate in an assessment during the recruitment process.
3. To find out whether a job applicant would be able to undertake a function that is intrinsic to the job.
4. To monitor diversity among job applicants
5. To support ‘positive action’ in employment for disabled people. (Positive action occurs when there are 2 applicants, one being disabled and they are equally suitable and qualified for the position and the employers gives the job to the disabled applicant)
6. If there is an occupational requirement for the person to be disabled.

**Access to Goods and Services** – service providers are required to make changes, where needed, to improve service for disabled customers or potential customers. There is a legal requirement to make changes to the way things are done (such as changing policy), to the built environment (such as making changes to the structure of a building to improve access) to provide auxiliary aids and services.

Where a service is being delivered from a building that cannot be made accessible through reasonable adjustments, it may be a reasonable adjustment to provide the service at different venue, including a home visit.

For instance, an NHS Trust or local authority may effectively force a disabled person to use a hoist in their own home (i.e. by refusing to offer manual handling assistance) where there are implications for dignity, privacy or safety.

The greatest concern in terms of manual handling is the perceived conflict between the right of the client to refuse to be handled in a certain way, and the right of the carer to refuse to put themselves in danger.

The RCN policy regarding manual handling in light of the Human Rights Act and a recent East Sussex County Council legal case emphasises the need to “negotiate the care package on an individual level based upon the carer and the disabled person’s needs...” The Royal College of Nursing guidance does not support “no lifting” policies.”

## Human Rights Act, 1998

The European Convention on Human Rights has been incorporated into United Kingdom law since October 2000, by means of the “Human Rights Act, 1998.”

Primarily, the Human Rights Act 1998 is about ensuring that public bodies do not breach the rights set out in the convention. As nursing homes, residential homes and care agencies carry out public-type functions by providing services on behalf of the NHS and local authorities, they could be considered to be public bodies.

The Act sets out a number of wide-ranging rights. Three, which most obviously have potential application to Manual Handling, are Articles 3.5 and 8.

- **Article 3** “no one shall be subjected to ...inhuman or degrading treatment”
- **Article 5** “everyone has the right to liberty and security of person.”
- **Article 8** “everyone has the right to respect for his private and family life, his home and correspondence.

## The Facts That Break the Back Bone of Moving and Handling

- Nurses and carers as a group suffer more lifting injuries than miners or builders.
- One in four nurses suffers back pain regularly at work or at the end of the working day.
- In the NHS, sickness absence due to musculoskeletal disorders (MSDs) accounts for around 40 per cent of all sickness absence.
- Around 3,600 nurses are estimated to leave the profession every year because of back injury.
- Health & social care had the highest number of reported handling injuries in 2011/12
- In 2010/11 there were 36171 RIDDOR reported handling injuries to employees, making up almost a third of all reports (31%).
- The cost of replacing trained nurses who suffer back injury is reckoned to be around £50 million per year.
- An estimated 80,000 nurses are off work with back problems every year.
- An estimated 1.5 million working days are lost to the health service every year because of back injury among nurses, costing a further £70 million.
- Royal College of Nursing's work-injured nurses group, said nurses suffer in silence because ‘Many are frightened of being labelled a ‘whinger’ by management, or become victims of the emotional blackmail that hospitals use to deter damages claims. It is not unusual for nurses suffering a serious back injury at work to be told that patient care budgets would be cut if they pressed a compensation claim.’

- Richard Bernhard, the RCN's director of legal services, said: 'Some employers resort to reprehensible tactics to resist a claim. They will brand the claimant a troublemaker and dissuade her colleagues from giving evidence.'

TAKEN FROM "MIND YOUR BACK" NURSING TIMES CAMPAIGN SUPPORTED BY ARJO  
BACKBONE OF SAFE LIFTING, HSE & RCN

## The Spine

The spine is made up of complex structures including 33 vertebrae, discs, muscles, tendons, nerves and the spinal column. It is divided into 5 main sections:

Cervical  
Thoracic  
Lumbar  
Sacrum  
Coccyx

**Facet Joints** – link the vertebrae together and limit the movement

**Intervertebral discs** – In between each vertebra there are discs which act as "shock absorbers" to help evenly distribute weight and ease movement between the joints. Each disc is made up of a fibrous ring of cartilage with a fluid nucleus centre. They allow free movement.

The intervertebral discs are made up of a strong fibrous layer called the annulus and a soft jelly like inner layer called the nucleus. The term "slipped disc" is misleading because it implies movement of the disc, which does not actually occur. In reality, the annulus gradually cracks open allowing all or part of the nucleus to "prolapse" or seep out. This usually occurs at the back of the disc close to where the spinal nerves emerge from the spinal cord. The pressure created by this situation causes severe pain and can incapacitate an individual for some time.

**Muscles** – support the spine in the upright position, produce and control movement.

**Ligaments** – hold the bones together and add to the stability of the spine.

**The Spinal Cord** – passes down through the middle of the spinal column in the spinal canal. It is therefore protected by the vertebrae.

**Spinal Nerves** – branch off at each level of the vertebral column and carry nerve impulses (sensory and motor) to and from the various body structures.

The most common areas for injuries to occur are the Cervical and Lumbar regions. With the most common injuries being to the soft tissues, muscles and ligaments.

A slipped disc occurs when the outer case of the disc ruptures (splits), resulting in the gel inside bulging and protruding out of the disc.

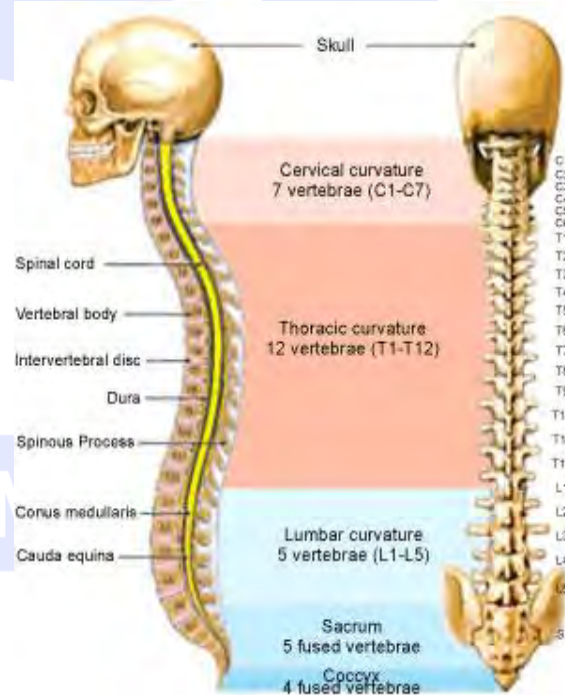
The damaged disc can put pressure on the whole spinal cord or on a single nerve root. This means that a slipped disc can cause pain both in the area of the protruding disc and in the area of the body that is controlled by the nerve that the disc is pressing on.

There are a number of other factors that can put increased pressure and strain on your spine. These include:

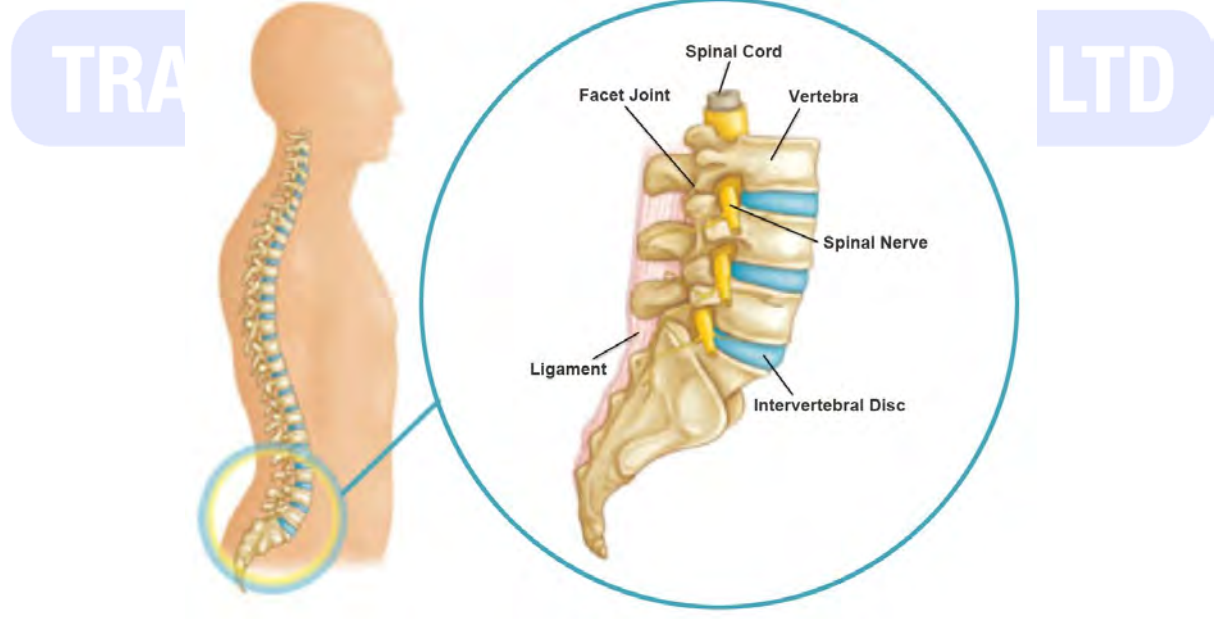
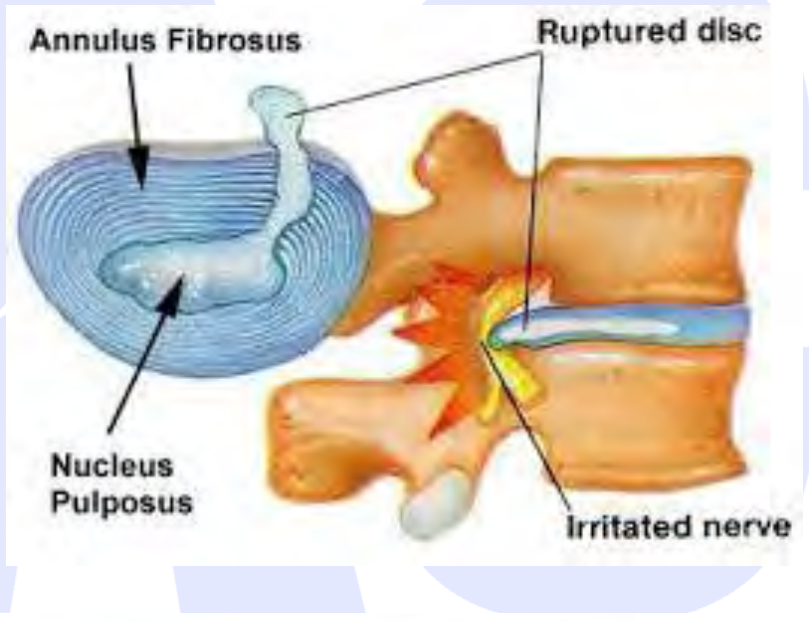
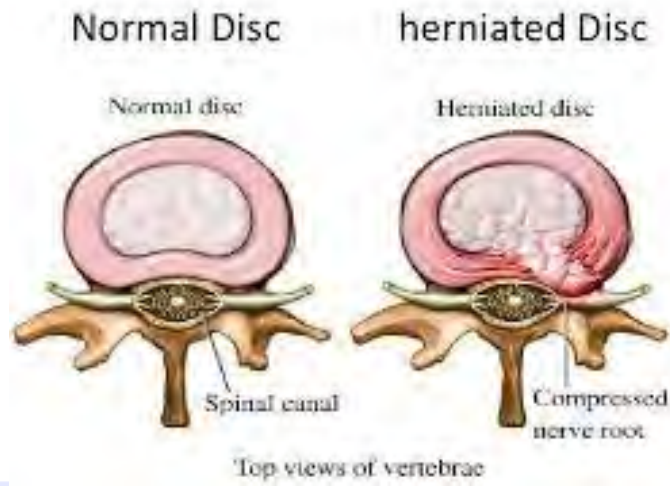
- Bending awkwardly
- Jobs that involve heavy or awkward lifting
- Jobs that involve lots of sitting

Other structures can also be injured causing problems such as sciatica, torn ligaments or tendons, sprains and strains, trapped nerves and hernia.

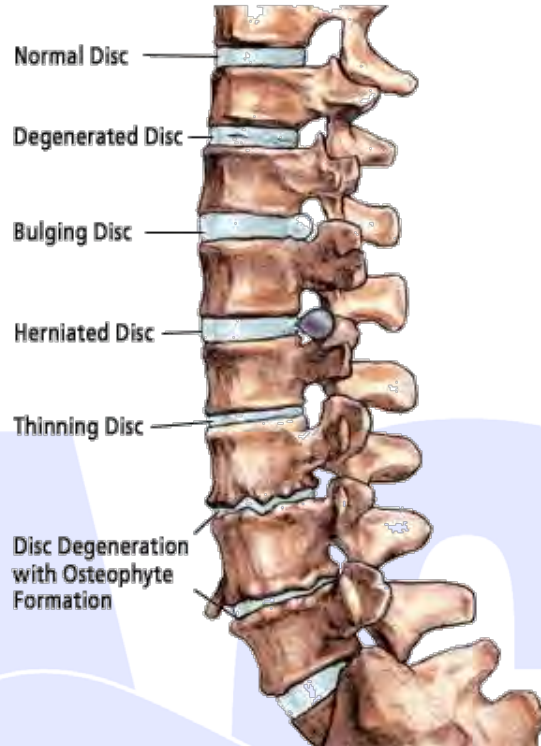
In order to avoid/reduce the risk of injury to the lowest level possible it is necessary to perform a moving and handling risk assessment prior to commencing any moving and handling tasks.



**TOTAL OF 33 VERTEBRA**



### Examples of Disc Problems



### The Ageing Process

#### Synovial Fluid

As part of the normal ageing process, the synovial fluid which cushions the bone 'thins' down, occasionally resulting in the bones rubbing together, causing damage to the surface.





### Ligaments

The ligaments hold the bones together. These loosen with the ageing process making the joint less stable.



### Bone Surface

The bone surface ages and becomes less smooth with time creating a 'grinding' action when the joint is moved.



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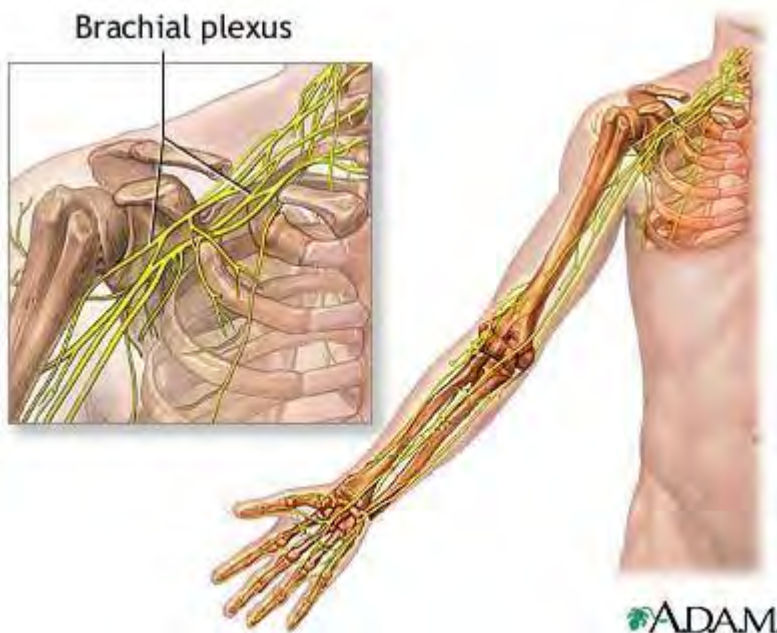
### The Shoulder Joint

The inward force caused by the curvature of the shoulder joint resulting in pressure on the clavicle and potential fracture in bone weakening conditions such as osteoporosis.



### Brachial Nerve

Pressure on the brachial nerve 'overloads' the neuro-responses in the brain, causing spasm and reduced muscle co-ordination.



**This is why any handling which involves the carer lifting or pulling by means of a “drag lift” are prohibited – it can cause damage or dislocation of the shoulder joint.**

## Common Causes of Back Injuries

Most injuries are the result of cumulative effects of five major factors:

- Poor posture – how we sit, stand or move.
- Faulty body mechanics – how we lift, lower, push, pull and move objects.
- Stressful living and working habits – staying in one position for too long and not learning how to relax.
- Loss of flexibility – becoming stiff and unable to utilise full range of body movement capabilities.
- Poor Physical Condition – losing the strength and endurance necessary to perform physical tasks without strain.

A back disorder begins to develop long before the first episode of pain and the problem usually remains after the pain subsides. The painful episode can be triggered off by a twist, a fall or even a sneeze. This minor injury irritates the stiff and weak soft-tissue structures in the back-causing muscle spasm and inflammation. As the episode runs its course, the important treatment becomes the prevention of future episodes.

**If you suffer acute back pain:**

- Assess and avoid doing what has caused the pain
- Rest if you must, but try to move normally and exercise where possible
- Take regular analgesia and anti-inflammatories
- If the pain continues for more than 3 days visit your own GP and consider visiting a chartered physiotherapist or registered chiropractor.

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### Risk Assessment

A competent, trained person who also holds a current moving and handling certificate must perform moving and handling risk assessments. Risk factors will vary according to the environment and the type of care being provided.

When appropriate involve the multidisciplinary team e.g., physiotherapist or occupation therapist in the manual handling risk assessment. It requires a multidisciplinary approach to ensure the safe handling of patients.

Risk factors will vary according to the environment and the type of care being provided. Below is a sample of risk factors that should be considered when performing a risk assessment – please note that this list is not exhaustive.

## L.I.T.E.E

An easy aid memoir to assist in performing risk assessments is the acronym “L.I.T.E.E.” – this stands for **LOAD, INDIVIDUAL CAPABILITY, TASK, EQUIPMENT AND ENVIRONMENT.**

The **LOAD** refers to any object you are going to handle. It could be a box, files or a piece of equipment however in the field of health and social care our **LOAD** for most of the time is a person. We would therefore need to take into account the Patient diagnosis.

### Patient Diagnosis

We must take into account factors affecting mobility such as amputation of limb, CVA, arthritis, paraplegia etc.

**Physical State:** is the person frail, elderly, able to balance or weight bear, terminally ill, suffering with chronic or acute pain, rigidity or immobility of limbs, suffering with sensory loss, conscious/unconscious, aphasic. What is their weight and is there any equipment such as catheters, IVI, drains, monitors which need to be taken into account.

**Psychological State:** unpredictable, able to understand, suffers with anxiety, is uncooperative, suffers with depression or has behavioural problems.

**Social Aspects:** language barriers, communication barriers, ethnic/cultural considerations, family involvement.

### The Load:

#### Is the load?

- Heavy
- Bulky or unwieldy
- Difficult to grasp
- Unstable or with contents likely to shift
- Sharp, hot or otherwise potentially damaging

#### Can it be made?

- Lighter
- Smaller or easier to manage
- Easier to grasp
- Less damaging to hold

### Individual Capability of the person/persons performing the task:

- Staffing levels
- Staffing ratios
- Training – adequate and assessed
- Experience
- Health status – has there been previous injury
- Pregnancy

- Age of staff
- Shift patterns
- Adequate rest breaks
- Return to work policy following sickness or injury Height/shape/size
- Vulnerability – students or new starters
- Adequate induction
- Individual capability – strength, physical fitness, stamina.

### The Task

- Contribution of patient
- Need for the task
- Frequency
- Duration
- Repetition
- Static postures – e.g. holding limbs for a long period of time.
- Reaching
- Pushing
- Pulling
- Twisting
- Stooping
- Awkward postures
- Sufficient numbers of staff
- Restrictions of movement
- Restriction of uniform
- Safe working practices

### The Environment

- Awkward tight spaces
- Adequate lighting
- Temperature/humidity
- Noise levels
- Slippery or uneven floor surfaces
- Adjustable furniture.

### Equipment

- Is there suitable equipment
- Has the equipment been tested?
- Will the equipment support the client's weight?
- Is the equipment in good working order?

Therefore, before handling people, we must know the basic details about the client, their height, weight, physical state, ability to help and their behavioural state;

- What is their attitude?

- Are there any handling constraints, a history of falls?
- What are the moves needed for the daily activities of living?
- How many people are needed to assist?
- What equipment is needed?
- What is the environment like?

**ALWAYS STOP AND THINK - ASSESS THE LOAD, PLAN THE TASK, FOLLOW SAFETY INSTRUCTIONS AND PREPARE THE ENVIRONMENT.**

It is your responsibility to familiarise yourself with the manual handling risk assessment of the patient you are working with. If there are any changes with the patient or if you feel that the risk assessment needs to be updated or amended, speak to your manager.

When recording in the manual handling risk assessment ensure that the documentation is accurate, up to date and objective as it acts a communication tool for all the multidisciplinary team and for the basis for any reviews.

## Normal Movement Patterns

Humans have learnt and refine seven primary movement patterns. As these patterns are constantly repeated they become ingrained and your brain can quickly recall them and put them into practice without requiring much concentration.

1. **Gait** - walking, running, sprinting
2. **Squatting** – using maximal knee bend and hip bend to lower our body down
3. **Lunging** – using knee and hip bend in a split stance position
4. **Pulling** - into the body
5. **Pushing** - away from the body
6. **Hinge** – using maximal hip bend and minimal bend to bend over (hinge) at the hips
7. **Rotational** – turning or rotating the body

In the manual handling of people one of our main aims is efficient movement, to enable us to do this we need to examine the normal patterns of movement. The other aspects we need to consider are:

- Contact with the patient
- The hand and foot position
- The position of our body to the patients and the direction of movement
- Starting and stopping forces
- Use of body weight
- Force direction

## Ergonomic

The Manual Handling Operations Regulations 1992 (revised 1998, amended 2002 & 2004) suggests an **ergonomic** approach to eliminating or reducing the risk of manual handling injuries. The format provided considers manual handling as a whole, and takes into account a wide range of factors including the nature of the task, the load, the working environment and individual capability. We should also include the equipment being used.

Ergonomics can be defined as the “science of work” it is the study of people, their working environment and the relationship between them. The word is derived from Greek language – “ergos” meaning work and “nomos” the study or law of.

When applied to manual handling risk assessment the aim of ergonomics is to make the best possible fit between the individuals and the work that they do – the focus of ergonomics is “the person” i.e. fitting the job to the person not fitting the person to the job. Unsafe, unhealthy, uncomfortable or inefficient situations at work or in everyday life are avoided by taking into account the physical and psychological capabilities and limitations of human beings.

**There are many factors, which play a part in ergonomics. These include:**

- Posture and movement – twisting, overreaching, lifting, lowering etc.
- Environmental factors – available space, room design, lighting, heating, ventilation, noise levels.
- Tasks being undertaken – appropriate, interesting, repetitive.

Some years ago, researchers compared the relative positions of controls on a lathe with the size of the average male worker. It was found that the lathe operator would have to stoop and move from side to side to operate the lathe controls. It was later realised that the person ideally suited to work the lathe would have to be four and a half feet tall, two feet across the shoulders and have an arm span of eight feet.

This example epitomises the shortcomings of design when no account is taken of the user. We all know that people come in all different shapes and sizes and ergonomists take these variabilities into account when influencing the design process.

## Biomechanics

Biomechanics is the principles of efficient human movement

**There are 3 principles to biomechanics:**

1. Use the centre of gravity
2. Use a stable base of support
3. Avoid tension and keep external levers short.

## Centre of Gravity

Everything has a centre of gravity which is the point where the total mass of the object is concentrated.

In an object, such as a box or cylinder, this is quite straight forward to calculate. However, the human body is capable of changing dimension at will. Therefore, the centre of gravity will alter according to position and sometimes move outside of the body. When we are stood upright with our hands by our sides our centre of gravity lies within the pelvis.

The further away from the body that our centre of gravity is, more effort is needed to keep our body stable e.g. if we are stood with our hands up above our head, this makes the centre of gravity rise making our body less stable.

The lower the centre of gravity is to the floor, the more stable we become.

If we are stood up, we can lower our centre of gravity by bending our knees and this will increase our stability which is particularly useful when we are moving a load

## Stable Base of Support

For a body to remain stable it must retain the line of gravity within its base. The person who is stood upright has a base which is the feet and the area between the feet. When we are stood with our feet together we render ourselves with a small base of support and a relatively high centre of gravity which is not a stable position. In order to improve stability, we should stand with our feet apart and our knees slightly bent – this widens our base and lowers the centre of gravity.

## Avoid Tension and Keep External Levers Short

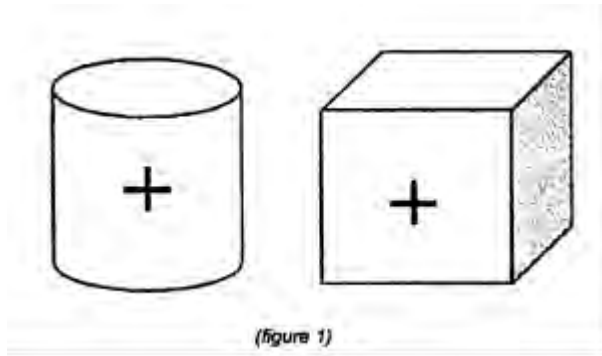
When we lean forwards our centre of gravity moves forward and the line of gravity falls outside the base rendering the body unstable. To compensate for this, our internal muscles, spinal discs and back ligaments come under extreme pressure to stop us from falling over.

If we maintained this position for any length of time, these structures will become fatigued and may recruit help from other groups of muscles – the body is now in a state of tension. If a person now wants to move a load only the peripheral muscles in the arm are available to assist in the effort of moving.

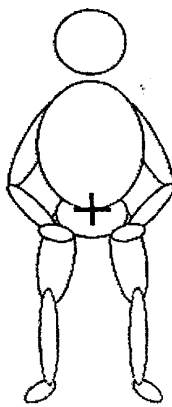
Therefore, the length of the external lever (i.e. the arms) should be reduced. This can be done by spreading the feet to widen the base and bending the legs to stabilise the base and lower the centre of gravity – this means that the line of gravity will be kept in the area of support and the body will remain stable.



**Principle 1:**  
**Centre of Gravity:**



Uniform objects such as boxes and cylinders will always have the centre of gravity in the middle as shown in this diagram.



(figure 2)

Figure 2 shows that in the upright standing position the centre of gravity lies within the pelvis.

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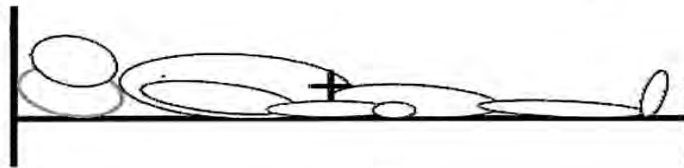
(figure 3)

When sitting in a chair, the centre of gravity will be outside the physical body (see figure 3).

Standing from a sitting position can be made easier by first moving forward in the chair, bringing ourselves closer to our centre of gravity, before standing up. This is important to remember when assisting someone else to stand (see figure 4).



(figure 4)



(figure 5)

Bodies in bed can pose problems.

When someone is lying flat in bed, the centre of gravity will lie in the pelvis. Should we wish to turn the client, we would use the pelvis to roll them, and the task becomes easier. This is an efficient use of body movement (see figure 5).



(figure 4)

**HEAD**

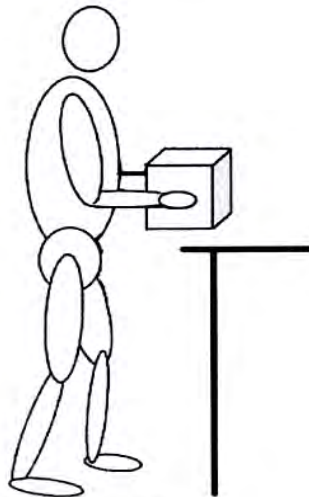
Lead with your head, raising your body and lifting the load smoothly.



(figure 5)

**BODY**

Keep load as close to your body as possible. Use your feet to change direction - do not twist or turn your body.



(figure 6)

**THE END**

Place load down close to your body. Manoeuvre the load once it is down.

The following pictures illustrate different ways of handling an object. They demonstrate how you can apply the 3 principles of biomechanics to greatly reduce your risk of injury.

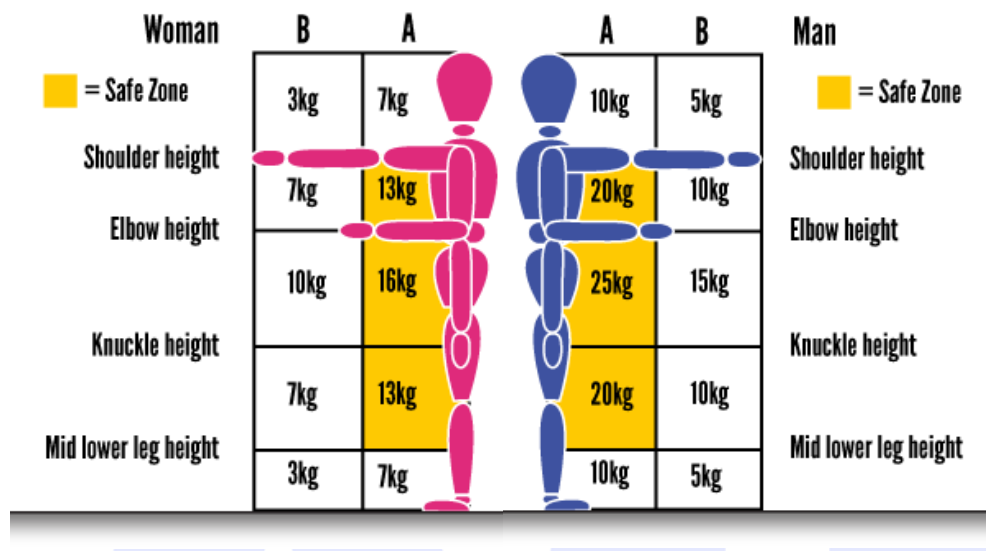


## How to Lift Heavy Objects

### ALWAYS KEEP YOUR BACK AS STRAIGHT AS POSSIBLE

1. Make sure you are standing directly in front of the item you wish to lift.
2. Check if the item has handles which you could use.
3. Know where you are taking the object before you begin.
4. Position your feet evenly (shoulder width apart).
5. Keep your back straight and stand up tall.
6. Tighten your stomach muscles.
7. Squat to the floor by bending your knees – DO NOT move your upper body.
8. Take hold of the object firmly with both hands.
9. Distribute the weight evenly – make sure you are not unbalanced.
10. Keeping the object close to your body, begin to stand up by straightening your legs (this will use your leg muscles and shouldn't put strain on other areas).
11. Stand up slowly. Do not move quickly or jerk when doing this.
12. You can now walk with the object, but be careful not to twist your body unnecessarily. Take small steps if possible.
13. If you are carrying a large object which restricts your view, ask if someone can guide you. This will prevent you from tripping or bumping into objects.
14. When placing the item down, bend your legs.
15. Remember to keep your back straight as you bend down again.
16. Be careful to lower each side of the object to the floor separately – this will avoid trapping your fingers under the weight the height that you will be lifting and the distance you will be required to carry the object.

## The below diagram is a weight guideline for lifting and lowering within that zone



## The Principles of Safe and Dignified Manual Handling of People

- Always consider the aim and overall objective to be served by every handling task.  
**NEVER LIFT A PATIENT UNLESS YOU HAVE TO**
- Assess the patient and medical and therapeutic factors, which may affect the handling method.
- Always explain what you are going to do and get the patient to cooperate and help as much as they possibly can.
- Discuss with the patient any fears they have
- Discuss with the patient the different manual handling options and give them a choice
- Obtain the patient's consent
- Communicate with the patient at all times during the move
- Communicate with your colleague at all times to ensure the patients safety
- Agree with you colleague before the move the commands to be used e.g. ready, steady, go
- Maintain the patient privacy and dignity at all times
- Always use the appropriate lifting aid or hoist.
- Prepare the environment and watch out for all hazards
- Know your own capabilities and the capabilities of all of those you are working with and what is required for the manual task.
- Foot position is vital – keep your feet apart and flex your knees

- Hand grip should be secure
- Hold the patient as close as possible and to your centre of gravity
- Keep the spine in line and the head upright – do not hold yourself rigidly as this can cause injury
- Use rhythm and timing i.e. clear instructions.

## Hoist

Hoists should be used for adults and children who are immobile or are very heavily dependent.

All carers require thorough training in the use of any hoist that they will be using with clients in their care. This training should also instruct the carer how to conduct simple safety checks prior to use.

### These checks should include:

- Checking the hoist has been charged (if appropriate)
- Checking all mechanisms of the hoist are working i.e. brakes, chassis widener etc.
- Checking that the sling's stitching and loops are intact.

Under the LOLER regulations 1998 all hoists and their accessories should be serviced by a competent person every 6 months and recorded for the carer to see.

The carer should ensure that for the client's comfort the sling is the correct size, that the client does not exceed the safe lifting load as indicated on the hoist and that they feel reassured and as comfortable as possible throughout the procedure.

### The Principles of Using a Hoist.

- Familiarise your client with the hoist and move well before the initial transfer
- Explain fully to the client what is going to happen and what you want the client to do
- Ensure that you have received training on the hoist
- Take your time in performing the move
- Ensure that the hoist is appropriate for the task and the user and environment.
- Ensure that the weight limit that the hoist will take is labelled on the hoist and also that it has been tested within the last 6 months.
- Ensure that any faulty equipment is reported immediately – if a problem occurs during use remove it from use and put a notice on it to inform others.

It is important to note that there should **ALWAYS** be 2 carers in attendance when using a mobile hoist.

Ceiling track hoists may be used by the service user handling the controls and one carer in attendance **PROVIDING** it has been risk assessed as safe – if not then 2 carers are required.

**There are 3 main types of hoist you are likely to see:**

- Mobile sling hoists
- Toileting/standing hoists
- Ceiling track hoists.

## Mobile Sling Hoist



Eliminate the need for manual lifting. They do not give person independence, but they reduce the physical effort and strain on the carer. They are used, for example, to move a client from bed to wheelchair. They should not be used to transfer clients over long distances.

The front of the chassis can be widened by a hand operated lever or foot pedal, enabling the carer to move either side of the chair, toilet, wheelchair etc. The chassis should be in a closed position when the hoist is being moved.

The boom rises and falls as hoisting takes place. The spreader bar usually rotates through 360 degrees; this increases the likelihood of manoeuvring the client into the correct position. As the boom rises the person is brought nearer to the mast. Carers need to be careful that the client does not hurt his knees or feet by knocking into the mast – it may be necessary to rotate the client.

Padded bars are important, as the spreader bar will come close to the client's face or chest as the boom descends. Brakes are fitted on most models of hoist. They are not normally used unless the hoist is being used on a slope, or if the client's legs are likely to go into extensor spasm, causing the hoist to move. It is often better to leave the brakes off when using the hoist on a flat surface as the

hoist will then move towards the client when the weight is taken, rather than move away and this reduces the risk of injury.

Mobile sling hoists can be operated either by a hydraulic pump or battery.

### Hydraulic Pump Operated Hoists:

#### Advantages:

- Tend to be cheaper than powered hoists
- They do not require charging

#### Disadvantages:

- Client has no control over the action
- The action of raising the hoist can be strenuous for the carer
- Hydraulic pumps tend to be jerky when the client is being lifted
- The handle is at a distance from the carer. It is difficult to calm or reassure the client whilst operating the hoist.
- This type of hoist often needs two carers to move a client.

### Battery Operated Hoists:

#### Advantages:

- The carer expends minimal energy
- If controls are on a wandering lead the client can control the lift
- The carer can stand close to the client and reassure them
- If the client is controlling the lift, the carer's hands are free to guide, e.g. the client's legs
- The task can in certain circumstances, be done by one carer.

#### Disadvantages:

- Batteries must be recharged regularly
- They cost more than hydraulic hoists
- Battery powered hoists are generally heavier to push than hydraulic hoists because motors and batteries add extra weight.

#### Battery powered hoists should also have:

- An emergency stop button
- An emergency lowering device
- A spare battery

Mobile sling hoists can sometimes be dismantled and are, therefore, easily transported.



## Toileting/Standing Hoists:



These hoists can be manually or battery operated, the features of which are the same as the mobile sling hoists.

Toileting/Standing hoists can be used alone or as part of a dual-purpose hoist that has an interchangeable boom and spreader bar, so that it can also be used as a standard mobile sling hoist. These types of hoist are used with clients who have some degree of upper body mobility, good sitting balance and good head and neck control.

A carer can transfer a client from sitting to standing, and if needed, move him whilst standing. This is useful for transferring a client to the toilet as one carer can then remove clothing, wash the client, change incontinence pads etc. Additionally, it gives the client some independence. The carer should make sure that the client has enough strength in his upper body to be lifted from this position.

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## Ceiling Track Hoists:



These hoists eliminate the need for manual lifting. In some situations, the client can be independent and control the lift if the controls are on a wandering lead and the client can put the sling on and off. If the hoist is operated by the carer, minimal effort is needed. This type of hoist is usually either mains or battery powered.

### Advantages:

- Reduces the need for storage space
- The client can retain some independence if able to negotiate the sling and control the lift without help
- There is less risk of injury to the carer
- They are safer than mobile hoists when transporting a client over longer distances

### Disadvantages:

- They are permanent fixtures, which may require expensive structural alterations to be made to the property.

## Types of Sling in General Use:

**Hammock sling** – this is a full sling, which is designed to give maximum trunk support during transfers and does not have a commode aperture.

For clients who experience discomfort using other types of slings these can be particularly useful as there is little pinching or nipping of the clients' skin due to their design.

**Divided Leg/All-purpose/General Sling** – this sling has a small aperture provided by separate leg pieces, but clothes would need to be adjusted prior to the sling being fitted if the client is being toileted. Alternatively, adapted underwear could be worn. This sling offers good trunk control and be put on/taken off a seated client fairly easily.

**Shoulder Sling** – this is a narrow padded sling, which is positioned around the lower back and underneath the arms, halfway down the client’s back and under the axilla. The client needs to have very good trunk control, and will need to be able to “lean back” into the sling to ensure it doesn’t pull or drag under their arms.

**Toileting/Bathroom Sling** – this sling provides good access to the lower back and buttock areas, but the client needs to have very good trunk control to use this type of sling safely.

	HAMMOCK SLING	DIVIDED LEG SLING	SHOULDER SLING	TOILETING SLING
<b>MOBILE SLING HOIST</b>	YES	YES	<b>NO</b>	YES
<b>STANDING HOIST</b>	<b>NO</b>	<b>NO</b>	YES	YES
<b>CEILING TRACK HOIST</b>	YES	YES	<b>NO</b>	YES
<b>BED TO CHAIR</b>	YES	YES	<b>NO</b>	<b>NO</b>
<b>TOILETING</b>	<b>NO</b>	YES	YES	YES
<b>FROM FLOOR</b>	YES	YES	<b>NO</b>	<b>NO</b>
<b>CHAIR TO CHAIR</b>	YES	YES	YES	YES

#### Other types of Slings Available:

**Patient specific slings** – are used by clients who have, or are suspected of having, infectious diseases to reduce cross infection. They cannot be laundered, and are discarded after use. Can be used for a relatively long period of time.

**Tailored Slings** – some sling manufacturers are able to tailor make slings for clients with an altered body shape. These slings can be made out of such materials that allow you to leave the sling in place behind the client. This is a particularly useful feature if the client sits in a moulded chair, which limits carer’s ability to move them for sling application.

## Other Moving and Handling Equipment:

### Transfer Boards:

Boards used to bridge the gap between two surfaces – the use of the blue medesign slings is prohibited.

Pat slides are large boards used to slide patients from bed to trolley and visa versa.

Smaller boards and banana boards can be used to assist clients or patients to slide from chair to commode, or chair to bed etc. Butterfly boards have a slide sheet attached to further assist when moving the client.

Weight limits are specified in the instructions provided by the manufacturer.



### Slide Sheets:

Tubular in design with a slippery nylon inner surface and a non-slip outer surface. Some have handles and some are padded – there are various designs, shapes and sizes available.

The slide sheet enables the person to slide up or across the bed with very little effort required by the handler.

Great care must be taken with slide sheets as they can move the patient very quickly and can cause the patient to slip if not used correctly.



**Turning Aids:**

Turn plates enable those patients who can weight bear to be turned during a transfer; they usually have a non-slip base and a low-friction core to provide controlled rotation.

There are various types available and manufacturer's instructions should be followed.

Turning aids are not suitable for those patients who cannot weight bear.

**Bath Lifts:**

There are many different types of aids available to assist patients in and out of the bath – they could be portable, fixed to the floor or built in with the bath. The same principles apply as to the use of hoists.



### Support Belts:

These are fitted around the waist of the patient. Support belts should never be used to lift patients – they should only be used to support.



### Patient Handling Slings:

These are used to help move patients from a chair or bed; the sling is positioned under the patient's thighs, buttocks or hips, avoiding the need for the carer to lean too far forward to achieve a good grip.

Handling slings should never be used to lift patients, as they do not reduce the load. In some places these slings have been banned.



## The Falling Person

Evidence shows that falls are a common occurrence. Over 60% of people living in nursing homes will fall, a third of people over the age of 65 years and fifty percent of those over 80 years living in the community will also fall. Approximately 5% of those falls will result in fractures.

Between 2001 and 2005 the Health and Safety Executive recorded a total of 957 injuries to healthcare staff which were caused by managing the falling or fallen person, which resulted in 3 days sickness absence or major injury. Over 10% of these reports were attributed to assisting the falling person.

It is generally perceived by most of us in the health/social care profession as unacceptable to let a person fall to the ground. However, it has long been considered inherently unsafe to attempt to catch a falling person.

### The Causes and Prevention of Falls:

These fall into two main categories; extrinsic and intrinsic.

Intrinsic	Extrinsic
Underlying medical condition e.g. postural hypotension	Hurrying
Strength, balance, gait and physical performance e.g. dizziness, use of walking aids, lack of gait symmetry and step continuity	Medicines e.g. polypharmacy
Physical functioning e.g. difficulty walking, urinary urgency	Altered environmental conditions
Foot problems and footwear	Variations in floor surfaces
Sensory decline e.g. vision problems, peripheral neuropathy	Space, furniture and layout
Medical conditions e.g. acute illness, history of stroke	Frictional variations between shoe and floor
Psychological factors e.g. fear of falling	Ill-fitting shoes
History of previous falls, particularly 3 or more during the last year or a previous fall with injury	Poor housing and lighting
Cognitive decline e.g. Alzheimer's disease.	

Risk assessment is the key to successful management and will take into consideration all of the factors which may place a person at higher risk of falls.

All organisations must have a documented policy/set of guidelines on how to manage the falling or fallen person.

### Managing the Falling Person

There are three options:

1. Lowering the falling person
2. Allowing the person to fall
3. Redirecting the fall

### Lowering a Falling Person

Lowering a falling person to the floor may reduce the risk/severity of injury to the person, thus promoting the duty of care.

“As a registered nurse or midwife, you must act to identify and minimise the risk to patients and clients” – Nursing and Midwifery Council - *Code of Professional Conduct* – Section 8

**Successful lowering of a falling person is dependent on:**

- The handler standing at the side of the person and slightly behind at the start of the fall
- The person falling backwards or directly downwards (*few people are in that position when someone falls – conditions have to be ideal to lower the person successfully*)
- Sufficient space with no obstructions
- The person not resisting
- No significant height difference between the person and the handler

- The person is not significantly heavier than the handler

### Allowing a Person to Fall

It has long been considered that to catch or to control the descent of a falling person is inherently unsafe for the handler. *Back Care 2005*.

#### Advantages of Allowing a Person to Fall:

- There is less risk of injury to the handler
- There is less risk of a secondary injury caused by the handler's intervention

#### Risks to the Person:

- Minor injuries such as lacerations and bruising
- Major injuries such as fractures and head injuries and possible complications
- Psychological trauma
- Fatality

#### Professional Responsibilities:

"Therapists have a responsibility to promote the dignity, privacy and safety of all clients" *College of Occupational Therapists (2000) code of Ethics and Professional Conduct for Occupational Therapists*.

"As a registered nurse or midwife you must act to identify and minimise the risk to patients and clients.....You must work with other members of the team to promote health care environments that are conducive to safe, therapeutic and ethical practice." *Nursing and Midwifery Council (2002) Code of Professional Conduct – Section 8*.

#### Over-riding the Learned Response

The definition of instinct is:

"An inborn impulse or tendency to perform certain acts or behave in certain ways"

#### Redirecting the Fall

- Away from furniture i.e. corner of tables or beds
- If the fall further increases the risk of an injury, i.e. towards oncoming traffic
- If the person is walking upstairs when they begin to fall.



## Commonly used Unsafe Lifting Practices



**The Drag Lift**

(© NBPA, reproduced by kind permission of BackCare)



**The Orthodox Lift**

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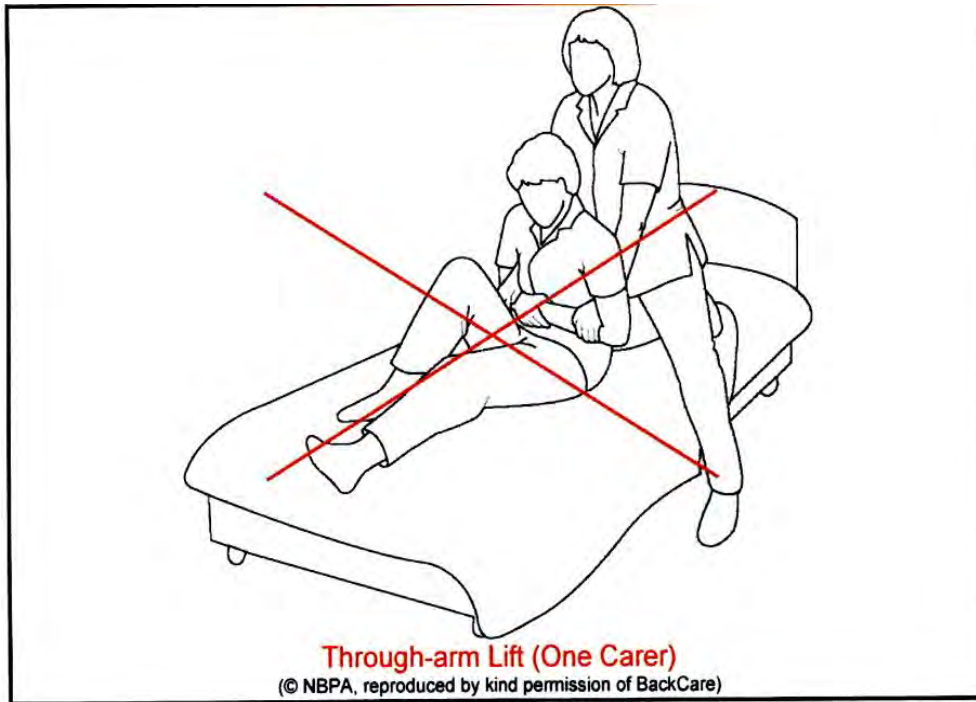
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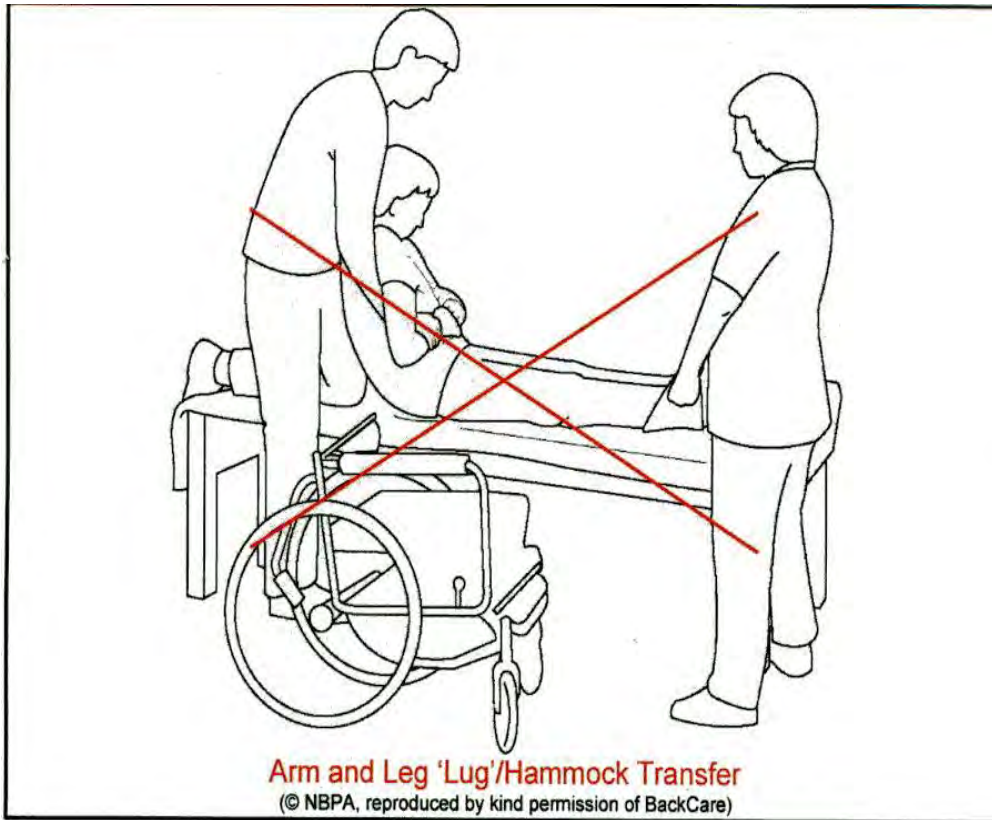
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Many of the lifting/handling techniques that have been used over the years are no longer acceptable in every day practice. A number of the techniques that were used are no longer considered harmful to both the service user and the carers – in some circumstances, they are even considered to be physical abuse and rough handling.

**The Nursing and Midwifery Council (2002) defines abuse as:**

“Any physical contact which harms clients or is likely to cause them unnecessary and avoidable pain and distress”.

Such abuse may occur due to ignorance and the poor application of handling techniques.

**The Drag Lift:** has been considered an unsafe technique since 1981. It is defined as any method of handling where the carer places a hand or arm under the client’s armpit. Use of this technique can cause damage to the carer’s spine, shoulders, wrist and knees. For the client, there is the potential of injury to the shoulder joint and soft tissues around the armpit, risk of fracture to the humerus and dislocation of the shoulder.

**The Orthodox Lift (Cradle):** this involves two carers placing their hands beneath the arms or behind the back and underneath the client’s leg. This technique involves the carer lifting at arm’s length whilst twisting at the trunk and holding the load away from the carer’s centre of gravity causing a great risk of injury. This technique has been considered unsafe since 1987.

**The Through-Arm Lift/Slide:** this often occurs when two carers work together at either side of the client to move or slide them into a sitting position on a bed. Each carer puts one hand through the client’s arm and takes hold of the client’s forearm. The carers face in the same direction as the client

and place their outer foot on the floor at the side of the bed. The other leg is placed on the bed with the knee bent to provide extra leverage, the carer's outer arm is used to lift the client's leg by placing the hand underneath the client's leg just above the knee. This can cause damage to vulnerable pressure areas and also applies pressure to the client's underarm and forearm. It can also cause pain to the client. The carer is at risk because of their posture and position. This manoeuvre has been considered unsafe since 1998.

**The Australian Lift:** when using this technique carers work on opposite sides of the client and facing the opposite direction to the client. The carers have their inner knees on the bed and their outer foot on the floor. They then bend forward to place their inside shoulders under the client's armpit, their inner arms go underneath the client's thighs, then they lift or slide the client up the bed. This poses a high risk of injury to both carers and client. The carers are trying to move an uneven load with the force applying to one shoulder. Injury can occur to the client's shoulder joint and also to the client's ribs. Shearing and friction can also occur to the client's sacral area and their heels.

**The Front Assisted One Care Pivot Transfer (Bear-hug):** this technique involves transferring a client to one seated position to another by holding and lifting the client by a transfer belt, bear-hug or otherwise. It involves a high risk of twisting for the carer and risks of unstable postures for both the client and the carer. The carer has difficulty in controlling the amount of effort required to carry out this technique, and there is a risk of the client falling/collapsing which may injure both parties.

## Practical Session

Your trainer will now lead you through a practical session on strategies and approaches for safely moving and handling patients, relevant to your role. They will include:

- Chair moves and transfers
- Bed/trolley/table moves and transfers
- Mobility
- Managing the falling/fallen patient
- Use of equipment available within the organisation, e.g. profiling beds, patient hoists and slings, bathing aids, sliding and transferring systems, small handling aids to promote independence.