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Moving and Positioning Individuals and Back Care

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Version 1

What is moving and positioning?

Moving and positioning is a key part of the working day for most employees; from moving equipment, laundry, catering, supplies or waste to assisting individuals to move or reposition. The term moving and handling applies more to objects and moving and positioning is a term used when referring to assisting an individual to be moved.

Manual Handling is the term used by The Health and Safety Executive, HSE.

During your training session you will hear a mixture of all of these.

Poor moving and handling practice can lead to

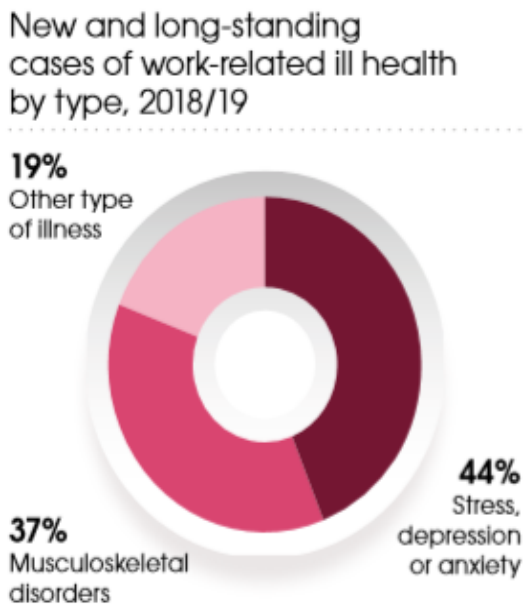
- Back pain and musculoskeletal disorders, which can lead to inability to work
- Moving and handling accidents – which can injure both the person being moved and the employee
- Discomfort and a lack of dignity for the person being moved

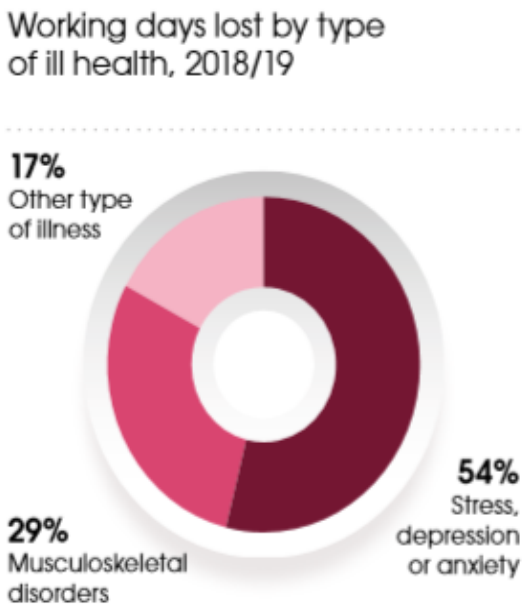
You must take action to prevent or minimise the risk of injury.

Incidence and severity

- 1.4 million Workers suffering from work-related ill health (new or long-standing) in 2018/19
- Work-related musculoskeletal disorders (MSDs), including manual handling injuries, are the most common type of occupational ill health in the UK. It is important to remember that:
    - There is a lot you can do to prevent them
    - Preventative measures are often simple and cost-effective
    - You cannot prevent all MSDs, but where they occur, early reporting of symptoms, proper treatment and suitable rehabilitation are essential.

- **Industries with higher than average rates of musculoskeletal disorders, averaged 2015/16–2017/18**





Common back conditions and back pain

Back pain is any ache, pain, tension, or disorder that affects the muscles or bones of the back from the base of the neck to the hips. It can be caused by damage to the muscles or the bones of the spine and ribs or to the discs between the vertebrae.

Low back pain is common and can be extremely painful. It can be difficult to cope with the severe pain but fortunately it is rarely due to serious disease. There are things that employers and workers can do to manage back pain and other musculoskeletal disorders (MSDs), in the workplace. People can be helped to remain in work or helped to make an earlier return to work.

It's not always possible to identify the cause of back pain but it's rarely anything serious.

Most back pain is what's known as "non-specific" (there's no obvious cause) or "mechanical" (the pain originates from the joints, bones or soft tissues in and around the spine).

This type of back pain:

- tends to get better or worse depending on your position – for example, it may feel better when sitting or lying down
- often feels worse when moving – but it's not a good idea to avoid moving your back completely, as this can make things worse
- can develop suddenly or gradually

- is sometimes the result of poor posture or lifting something awkwardly, but often happens for no apparent reason
- may be caused by a minor injury such as sprain (pulled ligament) or strain (pulled muscle)
- can be associated with feeling stressed or run down
- will usually start to get better within a few weeks

Medical causes of backpain

Conditions that can cause back pain include:

a slipped (prolapsed) disc (a disc of cartilage in the spine pressing on a nerve) – this can cause back pain and numbness, tingling and weakness in other parts of the body

sciatica (irritation of the nerve that runs from the lower back to the feet) – this can cause pain, numbness, tingling and weakness in the lower back, buttocks, legs and feet

ankylosing spondylitis (swelling of the joints in the spine) – this causes pain and stiffness that's usually worse in the morning and improves with movement

spondylolisthesis (a bone in the spine slipping out of position) – this can cause lower back pain and stiffness, as well as numbness and a tingling sensation

These conditions are treated differently to non-specific back pain.

Very rarely, back pain can be a sign of a serious problem such as:

- a broken bone in the spine
- an infection
- cauda equina syndrome (where the nerves in the lower back become severely compressed)
- some types of cancer, such as multiple myeloma (a type of bone marrow

General health, posture, spinal anatomy and physiology

Poor posture can affect you from head to toe, contributing to a number of problems.

Poor posture can strain the muscles at the back of your head, neck, upper back and jaw. This can put pressure on nearby nerves and trigger what are known as tension-type or muscle-spasm headaches.

Pain and tightness or stiffness in the back and neck can be due to injury and other conditions such as arthritis, herniated disks and osteoporosis, but poor posture is a common contributor. Though rarely life-threatening, back and neck pain can be chronic and reduce your quality of life.

Muscle weakness, tightness or imbalances, lack of flexibility, and poor alignment of your hips, knees and feet may prevent your kneecap (patella) from sliding smoothly over your femur. The ensuing friction can cause irritation and pain in the front of the knee, a condition known as patellofemoral pain. Poor foot and ankle alignment also can contribute to plantar fasciitis, a condition in which the thick band of tissue connecting your heel to the ball of your foot (plantar fascia) becomes inflamed and causes heel pain.

Your rotator cuff is a group of muscles and tendons that connect your upper arm to your shoulder. Muscle tightness, weakness or imbalances associated with poor posture can cause the tendons in your rotator cuff to become irritated and cause pain and weakness. A forward, hunched posture also can cause these tendons to become pinched (impinged). Eventually, this can lead to a tear in the rotator cuff tissue, a more serious injury that can cause significant pain and weakness and limit your ability to carry out daily activities.

A forward head posture may strain the muscles under your chin and cause your temporomandibular joint (TMJ) to become overworked. This may result in pain, fatigue and popping in your jaw, as well as difficulty opening your mouth, headaches and neck pain

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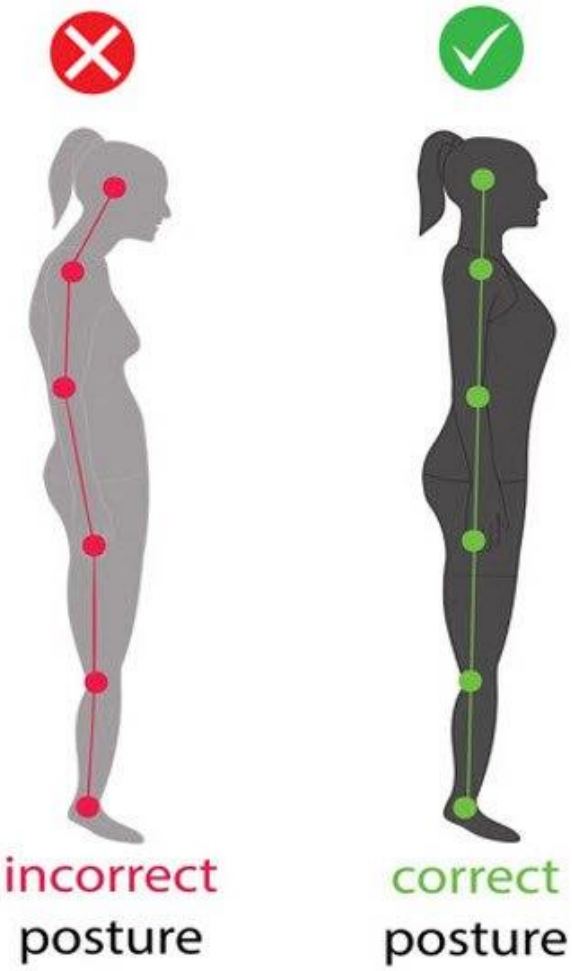
Poor postural habits may restrict your rib cage and compress your diaphragm. This can reduce lung capacity, leading to shallow or labored breathing, fatigue and lack of energy, which can affect your overall productivity.

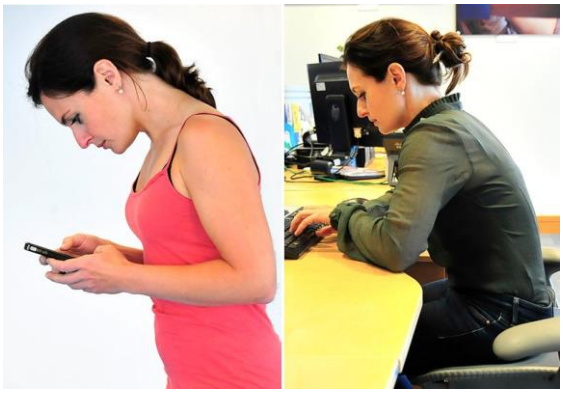


1. Slouching doesn't always cause discomfort, but over time this position can place strain on already sensitised muscles and soft tissues.

2. Sticking bottom out If your bottom tends to stick out or you have a pronounced curve in your lower back, you may have hyperlordosis. This is an exaggerated inward curve of the lower back that creates a "Donald Duck" posture.

3. Standing with a flat back A flat back means your pelvis is tucked in and your lower back is straight instead of naturally curved, causing you to stoop forward. People with a flat back often find it difficult standing for long periods.

4. Leaning on one leg Leaning more on 1 leg while standing can feel comfortable, especially if you have been standing for a while. But instead of using your buttocks and core muscles to keep you upright, you place excessive pressure on 1 side of your lower back and hip.



5. Hunched back and 'text neck'
Hunching over your keyboard is usually a sign that you have a tight chest and a weak upper back. Over time, this type of posture can contribute to you developing a rounded upper back, which can cause shoulder and upper back stiffness.

6. Rounded shoulders A way to tell if you have rounded shoulders is to stand in front of a mirror and let your arms hang naturally by your sides. If your knuckles face forward, it may indicate that you have a tight chest and a weak upper back, giving the appearance of rounded shoulders.

Spinal anatomy and physiology

Anatomy refers to the physical structure of the body that helps the body to move, i.e. the bones, joints, muscles.

Physiology refers to the functions of the body.

Musculoskeletal system refers to the body's skeleton, bones, joints, ligaments, muscles.

The spine has three important functions:

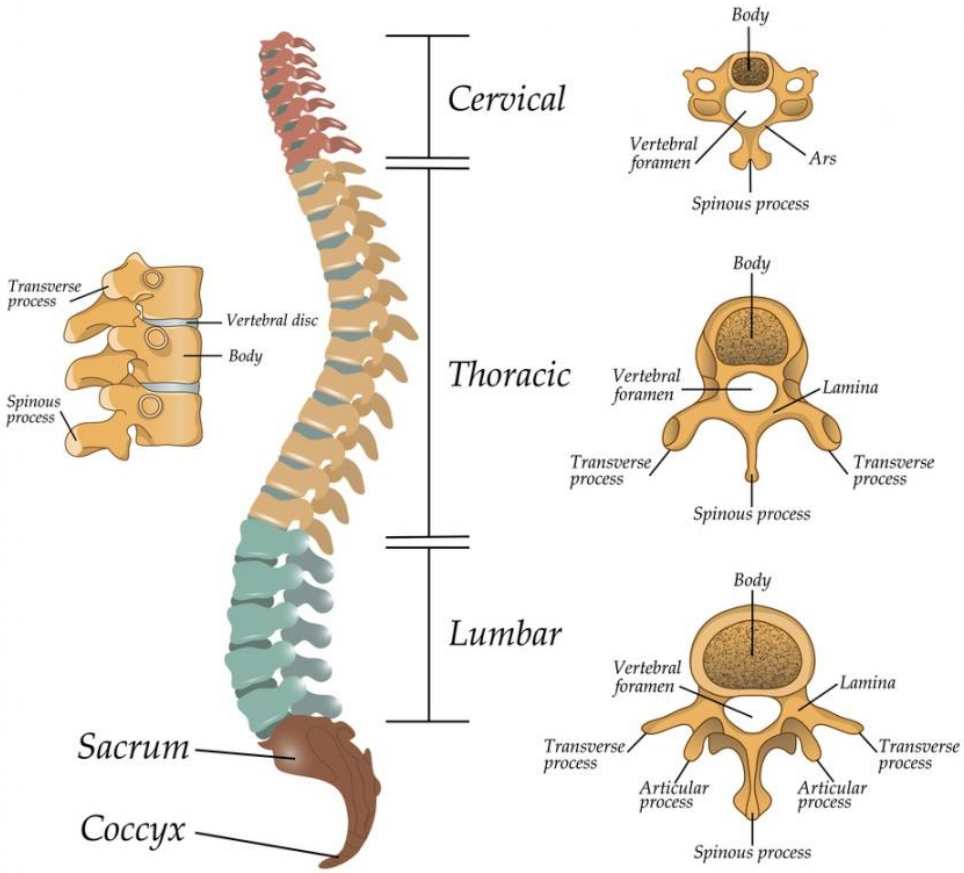
1. To support the weight of your body
2. To provide flexibility for movement,
3. To protect nerve roots and fibres and form a protective surrounding for the spinal cord.

The spinal column is one of the most vital parts of the human body, supporting our trunks and making all of our movements possible. Its anatomy is extremely well designed and serves many functions. The normal anatomy of the spine is usually described by dividing up the spine into three major sections: the cervical, the thoracic, and the lumbar spine. (Below the lumbar spine is a bone called the sacrum, which is part of the pelvis). Each section is made up of individual bones, called vertebrae.

All of the elements of the spinal column and vertebrae serve the purpose of protecting the spinal cord, which provides communication to the brain and mobility and sensation in the body through the complex interaction of bones, ligaments and muscle structures of the back and the nerves that surround it.

The normal adult spine is balanced over the pelvis, requiring minimal workload on the muscles to maintain an upright posture.

Loss of spinal balance can result in strain to the spinal muscles and spinal deformity. When the spine is injured and its function impaired, the consequences may be painful and even disabling.



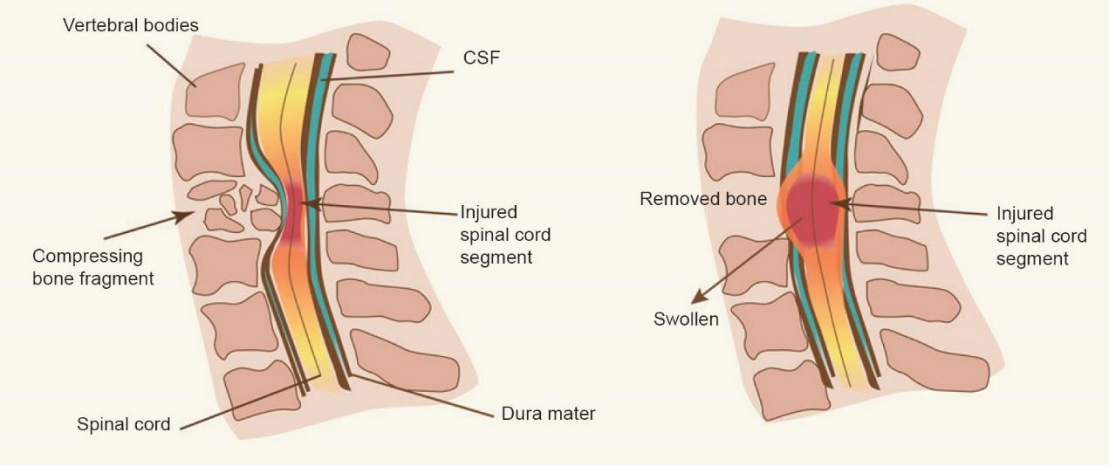
Humans are born with 33 separate vertebrae. By adulthood, we typically have 24 due to the fusion of the vertebrae in the sacrum.

The top 7 vertebrae that form the neck are called the cervical spine and are labeled C1-C7. The seven vertebrae of the cervical spine are responsible for the normal function and mobility of the neck. They also protect the spinal cord, nerves and arteries that extend from the brain to the rest of the body.

The upper back, or thoracic spine, has 12 vertebrae, labeled T1-T12.

The lower back, or lumbar spine, has 5 vertebrae, labeled L1-L5. The lumbar spine bears the most weight relative to other regions of the spine, which makes it a common source of back pain.

The sacrum (S1) and coccyx (tailbone) are made up of 9 vertebrae that are fused together to form a solid, bony unit.



A spinal cord injury (SCI) is damage to the spinal cord that causes temporary or permanent changes in its function. Symptoms may include loss of muscle function, sensation, or autonomic function in the parts of the body served by the spinal cord below the level of the injury

Legislation

- Health and Safety at Work Act (HASAW) 1974
- Management of Health and Safety at Work Regulations (MHASWA) 1999
- Reporting of Injuries and Dangerous Diseases Occurrences Regulations (RIDDOR) 1995
- Lifting Operations and Lifting Equipment Regulations (LOLER) 1998
- Manual Handling Operations Regulations (MHOR) 1992

The HASAWA is a general piece of legislation outlining the employers and employees' responsibilities when it comes to health and safety. Concerning moving and positioning, this includes providing and using the correct equipment, ensuring risk assessments are in place and followed.

The Management of Health and Safety at Work Regs 1999 provide clearer guidance and regulations for employers around risk assessments

If risks from moving and handling are to be managed successfully, there must be support from those at the top of the organisation, whatever its size. This can be expressed in a clear statement of policy – supported by organisational arrangements – to ensure that the statement is implemented. Key elements include:

- recognition of the risks
- commitment to introducing precautions to reduce that risk
- a statement of clear roles and responsibilities
- an explanation of what is expected from individual employees
- arrangements for training and providing / maintaining equipment
- arrangements for monitoring compliance
- a commitment to supporting people who have been injured in connection with their work

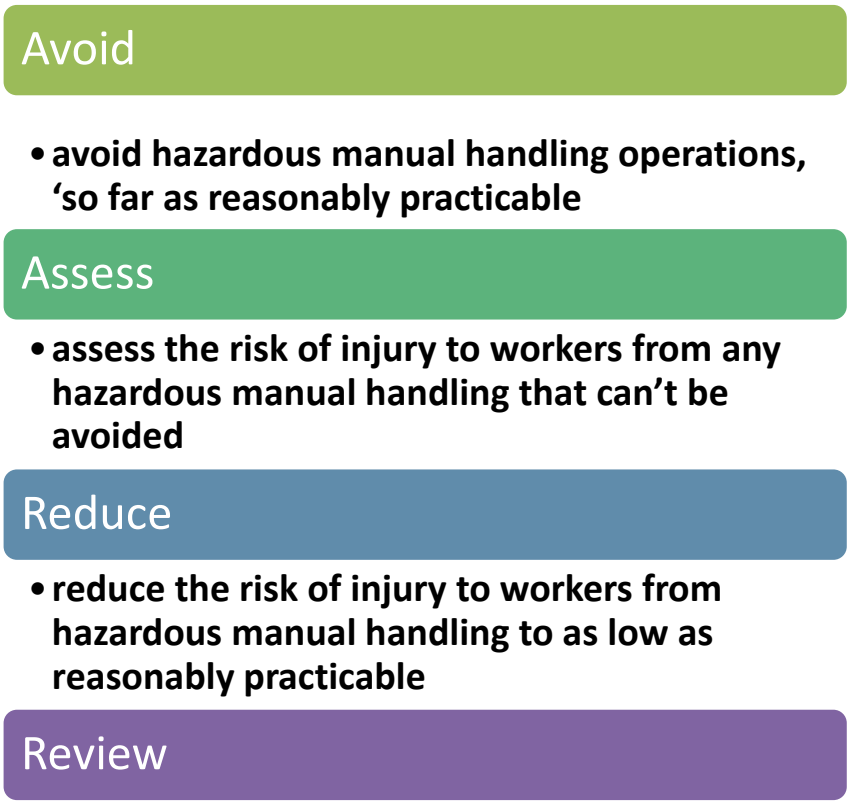
Employers must reduce the risk of injury to staff and people using care services by:

- avoiding those manual handling tasks that could result in injury, where reasonably practicable
- assessing the risks from moving and handling that cannot be avoided
- putting measures in place to reduce the risk, where reasonably practicable

Employees must:

- follow appropriate systems of work and use the equipment provided
- co-operate with their employer and let them know of any problems
- take reasonable care to ensure that their actions do not put themselves or others at risk

The Manual Handling Regulations set out a clear hierarchy of measures you must follow to prevent and manage the risks from hazardous manual handling:



Workers have duties too. They should:

- follow systems of work in place for their health and safety
- use properly any equipment provided for their health and safety
- cooperate with you on health and safety matters
- inform you if things change or they identify hazardous handling activities
- take care to make sure their activities do not put others at risk.

Lifting Operations and Lifting Equipment Regulations (LOLER) 1998

These Regulations (often abbreviated to LOLER) place duties on people and companies who own, operate or have control over lifting equipment. This includes all businesses and organisations whose employees use lifting equipment, whether owned by them or not. In most cases, lifting equipment is also work equipment so the Provision and Use of Work Equipment Regulations (PUWER) will also apply (including inspection and maintenance). All lifting operations involving lifting equipment must be properly planned by a competent person, appropriately supervised and carried out in a safe manner.

LOLER also requires that all equipment used for lifting is fit for purpose, appropriate for the task, suitably marked and, in many cases, subject to statutory periodic 'thorough examination'. Records must be kept of all thorough examinations and any defects found must be reported to both the person responsible for the equipment and the relevant enforcing authority.

Risk assessment

Hazard

- Anything with potential to cause harm

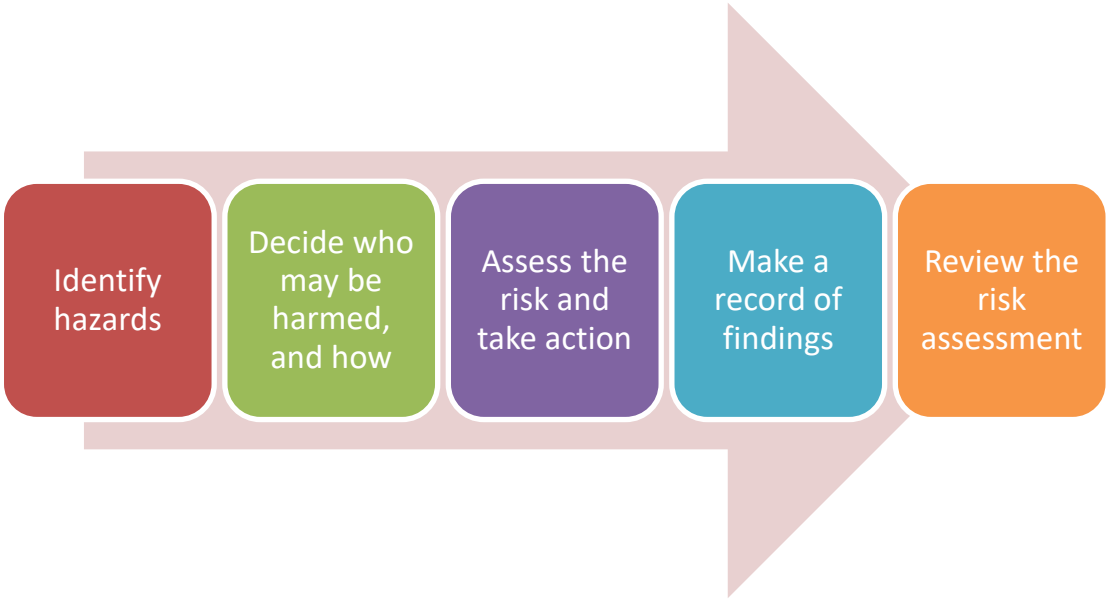
Risk

- The chance or likelihood that harm will occur

The importance of risk assessments

- To minimise the risk by managing and controlling the hazards
- To raise awareness in staff to help minimise the risks
- Should always lead to action to reduce the risk

5 steps to risk assessment



Moving and handling risk assessments help identify where injuries could occur and what to do to prevent them. It should be possible to complete the majority of assessments in-house as no-one knows your business better. The person carrying out the assessments must be competent to identify and address the risks from the most complex handling activities you undertake. This usually requires specific training.

Identify hazards

- Check for possible physical, mental, chemical and biological hazards.
- Classification of hazards:
    - Physical
    - Mental
    - Chemical
    - Biological

Decide who may be harmed, and how

Identify anyone who may be harmed.

This may include service users, staff, contract staff, visitors etc..

Consider each individuals vulnerability

Assess the risk and take action

How likely is it that each hazard could cause harm

This will determine whether you need to reduce the level of risk

Once action has taken place the remaining harm should be reassessed

Make a record of findings

The record should include details of any hazards noted in the risk assessment and action taken to reduce or eliminate risk

Provides proof

Used as the basis for a later review

This is a working document

You should be able to read it

It should not be locked away

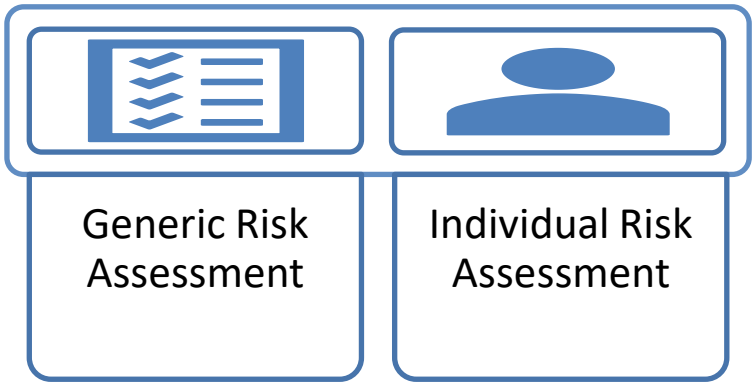
Review the risk assessment

A risk assessment should be under review to:

Ensure safe ways of working continue to be applied

Take account of any new working practices or hazards

Risk Assessment Tools



Two types of risk assessment are usually needed:

Generic assessments to consider the overall needs of the setting, looking at:

- the type and frequency of moving and handling tasks
- overall equipment needs
- staffing
- the environment
- what moving and handling would be required in emergencies such as fire evacuations or residents' falls

Individual assessments which consider the specific moving and handling needs of care service users and form part of the care planning process.

Generic risk assessments

Care providers should balance the safety of employees with the needs, safety and rights of the people using care services. Manual handling policies and practice should not place unreasonable restrictions on residents' rights to autonomy, privacy or dignity.

Risk assessment should be part of a wider needs assessment process to achieve the best outcome. Health and safety issues will then be identified and built into the complete care package.

Individual risk assessments

The assessment should be person-centred and, where possible, involve the service user or their family in decisions about how their needs are met. This can reassure them about the safety and comfort of the equipment, and how it and the methods used will ensure their safety and the safety of staff.

Record the risk assessment and care plan. Include detail on the individual's moving and handling needs, day and night, specifying:

- what the user of the care service is able/unable to do independently
- the extent of the individual's ability to support their own weight and any other relevant factors, for example pain, disability, spasm, fatigue, tissue viability or tendency to fall
- the extent to which the individual can participate in/co-operate with transfers
- whether the individual needs assistance to reposition themselves/sit up when in their bed/chair and how this will be achieved, eg provision of an electric profiling bed
- the specific equipment needed – including bariatric where necessary – and, if applicable, type of bed, bath and chair, as well as specific handling equipment, type of hoist and sling; sling size and attachments
- the assistance needed for different types of transfer, including the number of staff needed – although hoists can be operated by one person, hoisting tasks often require two staff to ensure safe transfer
- the arrangements for reducing the risk and for dealing with falls, if the individual is at risk

An individual's needs and abilities can change over the course of a day. Staff should understand the impact this may have on moving and handling practices.

Individuals may become upset or agitated when being moved. Others, though willing to assist at the start of a manoeuvre, may find themselves unable to continue.

Training may prevent injury arising in such circumstances. A natural reaction, while helping with walking, for example, is to try to prevent a fall. Injuries have occurred to both staff and the service user in such circumstances. Properly positioned, the helper may prevent a fall or allow a controlled slide. Having made the individual comfortable, they can determine how to move them safely – often with a mechanical aid.

Specialist advice on how to help some users with specific moving and handling needs will also be useful. Sources of advice include:

- occupational therapists
- physiotherapists
- manual handling advisers
- ergonomists with experience in health and social care
- professional bodies
- organisations such as the National Back Exchange or Chartered Society for Physiotherapists

It is a legal requirement to record the findings of your risk assessment if you have five or more staff. However, it is good practice to keep a record of risk assessments to help you manage the risks. You must communicate the findings of your assessment to all relevant staff.

Task

- Assessing the task this step should involve an examination of what the manual handling process involves on a basic logistical level, including the positioning of the load, the distance that needs to be travelled and the number of people needed to carry it out. In particular, consideration should be given to whether the lifter will need to stoop down or twist at the waste at any point, as well as making sure that those involved will have adequate opportunity to rest and recover.

Individual

- This step requires bosses to think about the personal capabilities of those involved in the work, including their age, preexisting health conditions, the equipment they possess and whether or not they require specialist training. Some tasks may require a person with a specific level of strength, while others may not be suitable for certain individuals due to prior injuries they may have sustained.

Load

- Some loads are more difficult to transport than others for reasons that go beyond whether or not they are heavy. As such, it's worth taking the time to think about whether the object in question has an unwieldy shape, whether it is difficult to grasp, whether it obscures the carrier's view when they hold it or whether its contents are likely to shift around during transit, which can affect balance.

Environment/Equipment

- The environment can also play a role in making a manual handling task more difficult. This is especially the case if space is restricted, if the ground is uneven or slippery, if the lighting or ventilation is poor, and if the environment is exposed to weather and the elements. As such, taking these factors into account should also be a key part of the risk assessment process.

Likelihood severity occurs	Potential Severity Rating			
	Minor	Moderate	Significant	Catastrophic
Very Likely	Moderate	High	Extreme	Extreme
Likely	Low	Moderate	High	Extreme
Unlikely	Very Low	Low	Moderate	High
Rare	Very Low	Very Low	Low	Moderate

Maximising Service User's own ability

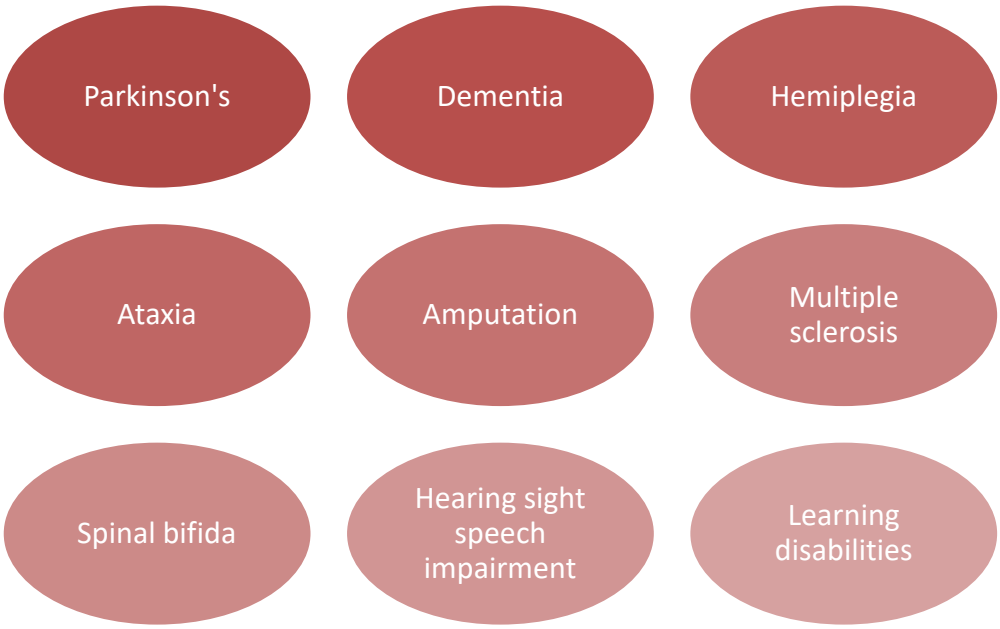
A	Able to perform daily activities independently without assistance from another person. Characteristics: Ambulatory, but may use a walking stick for support Independent, can clean and dress him/herself Generally, there is no risk of physically overloading the caregiver.	

B	Partly capable of performing daily activities independently Assistance may consist of verbal support, feedback or indications, but light physical assistance may also be necessary Characteristics: Can support herself to some degree and uses walking frame or similar Dependent on caregiver in some situations	
C	Incapable of performing daily activities without assistance, but is able to contribute to the action or perform part of the action independently Equipment should be used to prevent the caregiver risking physical overload from being exposed to unsafe levels Characteristics: Is able to partially weight bear on at least one leg Dependent on caregiver in many situations	

D	Incapable of performing daily activities independently or actively Unable to substantially contribute to the movement Transfers might include a sling lift. Characteristics: Cannot stand and is not able to weight bear. Is able to sit if well supported. Dependent on caregiver in most situations A high risk of dynamic and static overload for staff when not using proper aids	
E	Incapable of performing daily activities independently, unable to actively contribute to the movement Equipment should be used to eliminate this risk and make the patient as comfortable as possible. Providing optimum care and/or preventing complications due to immobility Characteristics: Might be almost completely bedridden, can sit out only in special chair	

	Always dependent on caregiver A high risk of dynamic and static overload for staff when not using proper aids	

Specialised Conditions



Different conditions that we need to be aware of and why it is important to follow independent risk assessments and support plans. Considering person ability, strengths, cognition, sequencing, muscle tone, pain management, limb stiffness.

Manual handling techniques – Including use of aids

Safe handling principles

- Wide, stable base
- Keep load close
- Maintain natural curves of back
- Soft Knees
- Full, firm grip

- Head up, chin in

Mobile stable base

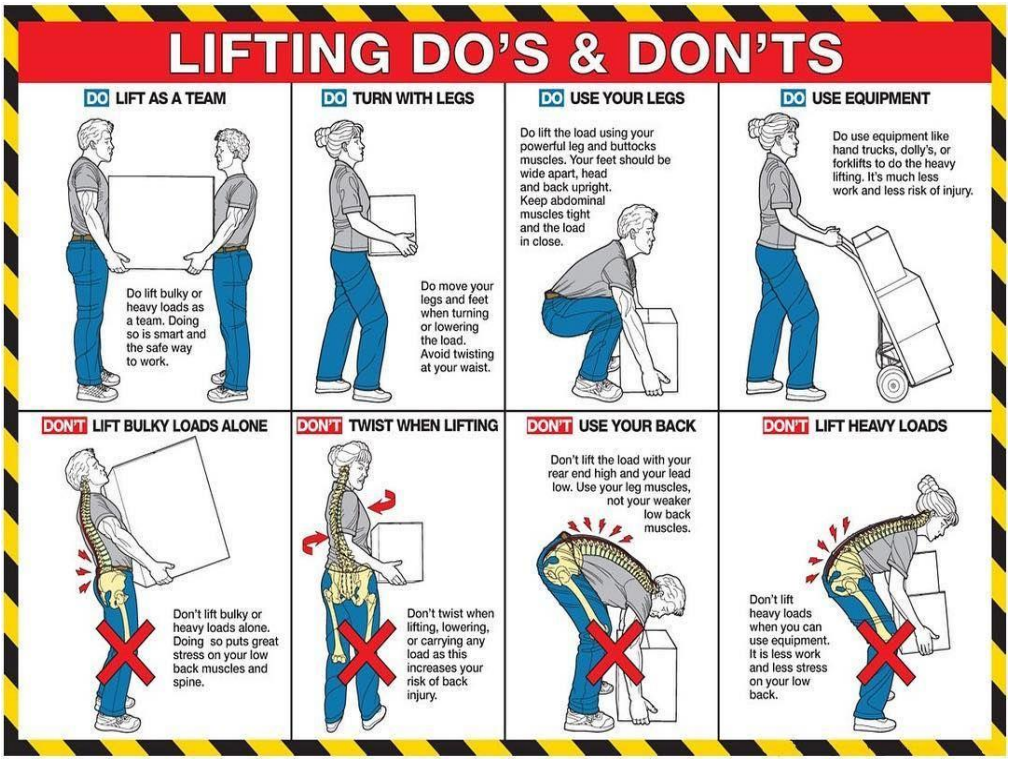
1. Feet shoulder Feet shoulder and hip width apart
2. One foot slightly in front of the other
3. Relax and soften knees

Different moving and positioning equipment

Hoist	Slings	Slide sheet	Stand aids
Rota stand	Transfer boards	Handling belts	Leg lifter
	Adaptations	Small pieces of independent aids	

Postures likely to cause back pain

- Stooping and bending
- Twisting
- Over reaching
- Holding load away from body
- Static Posture
- Extreme joint movement



Activities likely to cause back pain

- Rapid movements
- Repetition
- Duration and intensity
- Heavy Loads/forces
- Muscle fatigue
- Cold muscles
- Sudden Movements

How can you embed the 6 C's when moving and positioning individuals?