

LIVERPOOL HOPE UNIVERSITY



A guide to good working practices for manual handling activities in the workplace

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A guide to good working practices for manual handling activities in the workplace

What is manual handling?

Manual Handling is any work activity that includes 'any transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or by bodily force'. The 'load' can be anything regardless of size and weight and may be anything from paper supplies, boxes, books to larger items such as furniture.

In effect any activity that requires an individual to lift, move or support any object is classed as a manual handling task.

Using this definition it's easy to see why most work activities include some element of manual handling.

What are the risks?

Incorrect manual handling is one of the most common causes of injury across the University. It commonly causes work-related musculoskeletal disorders.

It is important that you are aware of the risks manual handling can cause and understand the practical ways to reduce those risks.

Manual handling injuries can happen anywhere including when people are in work. Work activities that involve any aspect of manual labour or effort, awkward or poor working postures, using manually assistive equipment or repetitive manual tasks can all be risk factors that mean you could sustain an injury. Also any previous or existing injuries increase these risk factors and can lead to inflaming or worsening of an existing condition. There are a wide range of injury's that can occur as a result of manual handling and these are commonly referred to as musculoskeletal disorders (MSD's)

Generally, the term MSD refers to any injury, damage or disorder of the joints or other tissues in the upper limbs, lower limbs or the back.

Upper Limb Disorders (ULDs)

Upper limb disorders affect the arms from shoulder to fingers or the neck including problems with the soft tissues, muscles, tendons and ligaments, along with the circulatory and nerve supply to the limbs.

Symptoms associated with ULD's may include stiffness or pain from joints and an inability to straighten or bend those joints. Also, aches and pains, tenderness, stiffness, weakness, tingling, numbness, cramp and swelling to muscles of the arms or the neck are also noted.

Common risk factors related to upper limb disorders include:

- incorrect or poor posture when seated or standing;
- working in an unusual position;
- carrying heavy or repetitive loads by hand;
- working for prolonged periods without a break or rest period;
- overuse or damage to the limb or some other underlying condition.

Lower Limb Disorders (LLDs)

About 20% of reported MSDs affect the lower limbs. Lower limb disorders typically affect the hips, knees and legs and typically occur because of overuse. It is common for workers to report general lower limb pain including aching or numbness without a specific condition being identified.

Common risk factor related to lower limb disorders include:

- Repeated kneeling, squatting or bending;
- Fixed postures for prolonged periods (more than 2 hours without a break);
- Frequent working and movement between different heights.

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.

The exact cause of back pain is often unclear but common risk factors include:

- heavy manual labour;
- handling tasks in heavy industry or in awkward places like delivery work;
- repetitive tasks such as manual packing of goods;

- sitting at a workstation for a prolonged period of time, especially if the workstation is not correctly arranged or adjusted to fit the person using it;
- driving long distances or over rough ground particularly if the seat is not properly adjusted or adequately sprung;
- Stooping, bending over, crouching or carrying out stretching, twisting and reaching tasks.
- pushing, pulling or dragging loads that require excessive force;
- working beyond normal abilities and limits or when physically overtired.

Staff who have experienced back pain often report painful, tenderness or stiffness of the backbone, unable to straighten or bend your back properly. For muscular problems there may be tenderness, aches and pains, stiffness, weakness, tingling, numbness, cramp and swelling to your muscles of the torso, which may cause some breathing issues too e.g. pain on taking deep breaths.

Reducing the Risk

Although there is a high risk of injury associated with manual handling, there is plenty that can be done to reduce this risk. Given the wide range of work activities that involve some aspect of handling means that a systematic and thorough approach is best.

The most effective way to reduce the risks associated with manual handling is using a risk assessment. This provides the opportunity to consider all the risks involved and the sensible ways to reduce risks in different ways.

Manual handling can be considered as a common hazard as part of any activity based risk assessment. Alternatively, for less frequent activities that are solely based on manual handling, e.g. setting up for an event, office moves etc - a specific manual handling risk assessment may be more suitable.

To assess the biggest risk first, the first question that should always be asked is;

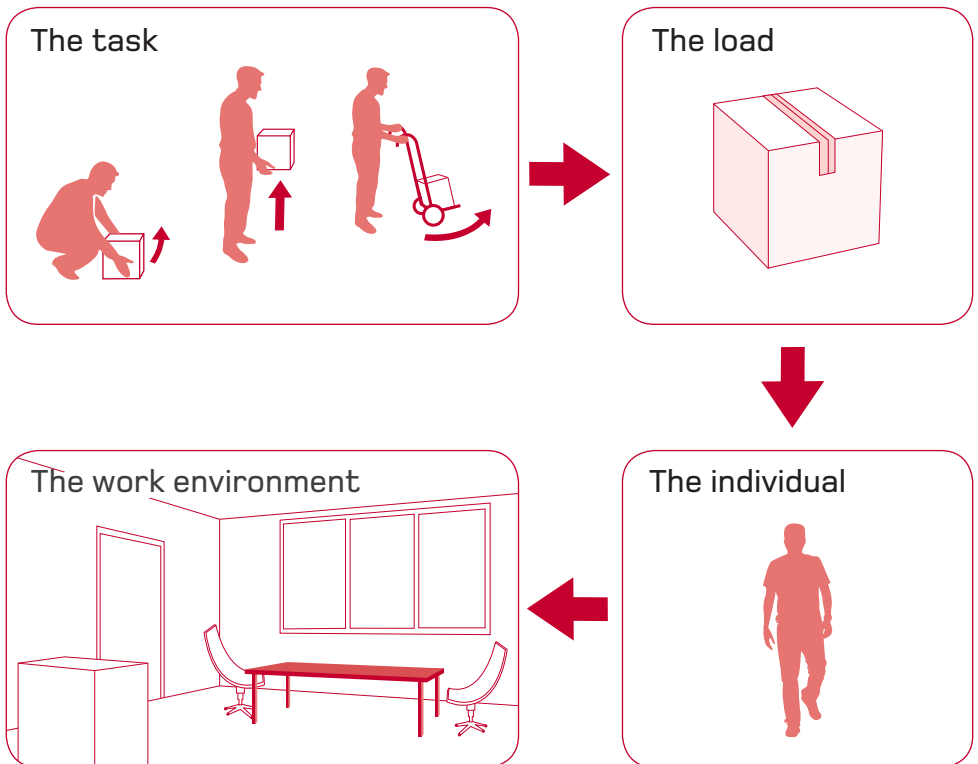
1. "Does the load need to be moved at all?" Can the task be re-designed to avoiding any lifting or carrying? Avoiding manual handling tasks is the best way to reduce the risk of injury.
2. Assuming the load does need to be moved, then consider whether it can be moved mechanically. For example could a pallet truck, trolley or other handling aid be used?

Making an assessment

Where manual handling can't be avoided, you will need to **ASSESS** the risk of injury and **REDUCE** the risk of injury as much as practically possible. To help with this process try;

- making the load smaller or lighter and easier to lift,
- breaking up larger parcels or packages into more manageable loads,
- modifying the workstation to reduce carrying distances, twisting movements, or the lifting of things from floor level or from above shoulder height,
- improving the environment – e.g. better lighting, flooring or air temperature can sometimes make manual handling easier and safer,
- Ensuring the person doing the lifting has been trained to lift as safely as possible.

All manual handling activities can be broken down into 4 separate parts;



| | |
|--------------------|---|
| Task | <ul style="list-style-type: none"> • Could you reduce the distance to be travelled? • Could you reduce how often lifting is repeated? • Could you alternate lifting tasks with other duties? • Could you consider using alternative equipment e.g. trolleys? • Could you make other improvements to the work routine? • Do you need to arrange any additional training, perhaps if new handling equipment is being used? • Can you alter workloads or deadlines if this puts pressure on the rate staff are working at? |
| Individual | <ul style="list-style-type: none"> • Consider any pre-existing injuries that you may have? • Consider any vulnerable staff that are involved (including pregnant women). • Ensure there is adequate information regarding the load i.e. is it correctly labelled? • Have you completed relevant manual handling training? • Ensure that the correct lifting techniques are understood and followed. |
| Load | <ul style="list-style-type: none"> • Can you reduce the weight? i.e. split parcels or packages down into smaller loads? • Can you reduce the size of the load? i.e. by transferring it to a different container? • Is there any way of making it easier to hold? i.e. using handles or wearing gloves. • Ensure the load is stable before lifting. |
| Environment | <ul style="list-style-type: none"> • Check the space around you and the layout of any travel routes prior to lifting. • The flooring around you should be in good condition. • Any changes in level should be clearly marked and avoiding whilst carrying larger objects if possible, if not then make a note of them prior to lifting. • There should be good lighting throughout the work area. • Is your clothing and footwear suitable to allow a free range of movement and to work comfortably? • Is the temperature excessive? It should neither be too hot or too cold. |

Correct Lifting Techniques

Good posture and a correct technique is key to avoiding injuries that are commonly associated with manual handling. Follow the tips below and stay safe!

1. Think before you lift

Plan the activity before you start. Where is the load being moved to? Is there a clear path? Do you need help?

2. Keep the load close to your waist

Keeping the heaviest side of the load nearest your body will help to reduce the strain on your back muscles, if this can't be done for duration of the lift make sure the load is closest to you before you try to lift it.

3. Adopt a stable position

Your feet should be apart, ideally close to the object that's going to be lifted and with one front slightly in front of the other to maintain balance. Ensure a good grip on the load.

4. Don't bend your back excessively

A slight bending of the back, hips and knees is all that's required to start a lift.

5. Don't flex the back whilst lifting

This can happen if the legs are straightening as you're raising the load, keep your back, hips and knees slightly bent.

6. Keep your head up

Reduce the strain on your neck by looking straight ahead when lifting. Look ahead whilst carrying there load as there may be obstacles!

7. Don't twist

Don't twist your back or move sideways whilst carrying, keep your shoulders and hips level and use your feet first to change direction.

8. Move smoothly

Don't jerk or move the load quickly, slow steady movements reduce the risk of injury.

9. Know your limits!

Do not attempt to lift or move something that you are unable to, if you're unsure ask a colleague to help.

10. Put the load down then adjust

If the load needs to be positioned precisely, put it down first then adjust. If possible slide the object to where it should be.

Manual Handling Training

All staff that regularly undertake a lot of manual handling as part of their work routine should complete practical manual handling training within their department. It is recommended that such training is completed at least every 3 years. This guide is designed to assist you but is not a substitute for formal safety training.

To enquire about manual handling training and the different types of courses available. Please contact the Legal Services and Health and Safety Assistant.

Manual Handling FAQs

Are there any recommended weight limits?

The law does not identify a maximum weight limit nor is there a universally safe minimum or maximum weight for any load. There are basic guideline figures for lifting and lowering but this should only be used as part of a detailed risk assessment. Other factors such as strength; individual fitness; the presence of any underlying physical conditions; the object to be lifted and the distance to be carried also need to be considered when assessing the risks involved. The University has a duty to manage and control this risk and the measures that will need to be taken will vary with the circumstances of each task.

The Manual Handling Operations Regulations gives basic guideline figures for lifting and lowering which indicate when a more detailed risk assessment should be carried out.

What should a manual handling training course involve?

Training should be used to raising awareness of manual handling in an effort to help reduce the risks involved. Typical manual handling sessions should cover the following general principles but can be adapted to suits the needs of individual departments:

Manual Handling training should cover:

- manual handling risk factors and how typical injuries can occur;
- practical instructions on how to carry out safe manual handling through good handling techniques;
- appropriate systems of work for the individual's tasks and environment;
- the use of mechanical aids;
- Practical work to allow the trainer to identify and put right anything the staff are observed not doing safely.

Training alone is not enough to ensure safe manual handling, sessions should be supplemented with monitoring and reviews of working procedures to ensure that the training is understood and being applied correctly by staff. Reporting problems such as unsafe working conditions or accidents need to be reinforced through good supervision and gathering staff feedback.

Is there a single correct lifting technique?

No, there is no single correct way to lift. The technique for lifting will depend on many things, such as the weight and size of the item. For example, it would be easier to pick up something that is boxed and has handholds than something awkwardly shaped or where the weight is unevenly distributed such as a water cooler refill bottle.

The Health and Safety Executive (HSE) has published guidance which contains illustrations of good handling practice and information about different handling techniques can be provided through practical training sessions.

Where can I find the forms to complete a risk assessment?

The University's standard risk assessment template can be used to complete manual handling risk assessments and this form can be found on the Health and Safety section of the University's website.

For office environments, manual handling is featured on the standard risk assessment template for lower risk work areas but this document should be adapted to suit the specifics of each department's office areas. Again, these templates are available online or on request from the Legal Services and Health and Safety Assistant.

Who should see the completed risk assessment?

Once completed the risk assessment should be circulated to those staff involved with the lifting task and anyone else that may be required to complete further actions (as detailed within the assessment) before the task or activity is completed. The risk assessment can then be stored electronically for reference or future use. A copy can also be provided to the Legal Services and Health and Safety Assistant if further guidance is needed.

What about handling unmarked loads, like deliveries?

Smaller, lighter items do not have to be marked with weight information as the Manual Handling Regulations are only concerned with hazardous manual handling. For larger items, a general indication of the range of load weights likely to be encountered is all that is required and this can be noted within the risk assessment and provided to staff.

Training sessions can be used to give general indications about different load weights and to teach staff to be cautious when handling unmarked loads by testing loads prior to lifting.

Some staff handle quantities of small items by pushing them around on trolleys. What weight information has to be provided?

For tasks that involve pushing or pulling rather than lifting or carrying, you may not need to provide weight information, because the weight of each item is not so relevant to the risk. What matters is the amount of force required to move the load (the trolley), which depends on things like the suitability and condition of the trolley (are the wheels and handles in good working order?), the smoothness of the floor within the work area and whether it is level or sloping.

There is no requirement to give force information to staff. Instead, you should concentrate on reducing risks by providing good trolleys and working conditions and training staff in good pushing and pulling techniques. Staff should also be aware not to overload trolleys and to recognise when they reach the safe working load for the equipment they are using.

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