

CARDIFF COUNTY COUNCIL

CODE OF GUIDANCE

MANUAL HANDLING

Many of the accidents reported by Cardiff County Council employees arise from the manual handling of loads, and for some occupations e.g. cleansing staff, care staff etc. it is a significant hazard. Most manual handling accidents cause injury to the lower back, although hands, arms and feet are also vulnerable. Sometimes the injury can be quite severe and the victim might never fully recover.

This Code of Guidance addresses the following:

1.0 The requirements of the Manual Handling Operations Regulations 1992.

2.0 Safe Lifting Techniques

- Basic Lift
- Pushing and pulling
- Awkward objects
- Lifting to a high place
- Lowering from a high place
- Handling ladders, timber, pipes etc.
- Drums
- Sacks
- Sheet material
- Team lifts
- Checklist for safe lifting

3.0 General steps to Reduce the Risk of Injury

- Mechanical assistance
- Consider task, load, working environment and individual capability

4.0 - [Risk Assessment Record for Manual Handling Operations](#)

1.0 The Requirements of the Manual Handling Operations Regulations 1992

The Manual Handling Operations Regulations 1992 apply specifically to work involving manual handling activities. The Regulations define a manual handling operation as “any transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or bodily force.”

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The Regulations place a duty on Cardiff County Council, as an employer, to :-

- **Avoid** the need for hazardous manual handling, as far as reasonably practicable;
- **Assess** the risk of injury from any hazardous manual handling that cannot be avoided; and
- **Reduce** the risk of injury from hazardous manual handling, as far as reasonably practicable.

Employees also have duties too. They should :-

- Follow appropriate systems of work laid down for their safety and co operate with the employer on health and safety matters;
- Make proper use of equipment provided for their safety;
- Take care to ensure that their activities do not put others at risk.

Avoiding Handling

The best way to avoid injuries from manual handling operations is to avoid handling altogether. This means finding alternative ways of doing the job so the risk of injury is reduced or eliminated. For example, jobs can be redesigned so that the need for excessive lifting or handling is reduced. Other solutions may involve the use of mechanical equipment or aids to move loads around.

Assessing the Risk

If manual handling cannot be avoided then a risk assessment will need to be carried out. The assessment must be carried out by a “competent person”. This is someone with appropriate knowledge and experience of the manual handling activities; who is familiar with the Manual Handling Operations Regulations 1992 together with the associated Code of Guidance; has a basic understanding of human capabilities; can identify high risk activities; and can recommend practical steps to reduce risk. How detailed the assessment will need to be depends on the task being carried out. Simple handling activities may only require a relatively straight-forward assessment, using the Council’s Manual Handling Risk Assessment documentation (Appendix ‘A’). More complex handling operations e.g. people moving, would require specialist advice.

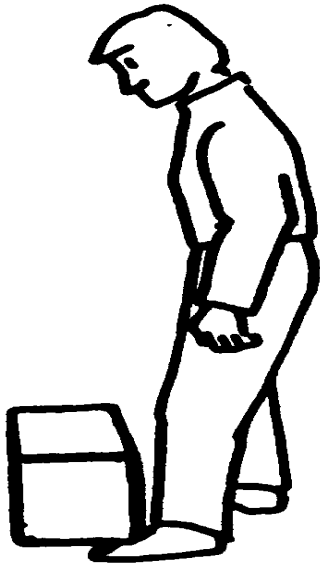
The significant findings of manual handling risk assessments should be recorded. The assessment will also need to be reviewed if there is reason to suspect it is no longer valid or if there is a change in the handling task.

2.0 Safe Lifting Techniques

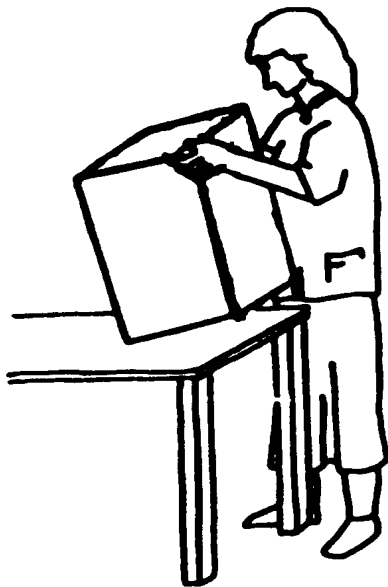
The development of good handling technique is no substitute for other risk reduction steps such as improvement in task, load or working environment, but form a valuable adjunct to them. The following outlines important points for safe lifting.

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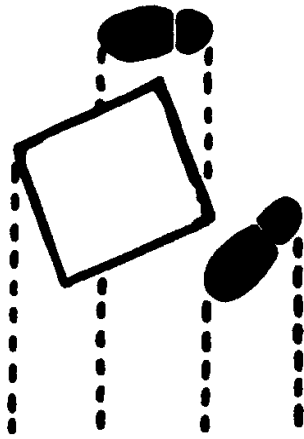
Basic lift



Stop and think. Plan the lift. Where is the load going to be placed? Use appropriate handling aids if possible. Do you need help with the load? Remove obstruction such as discarded wrapping materials. For a long lift - such as floor to shoulder height - consider resting the load mid-way on a table or bench in order to change grip. Never rush manual handling operations

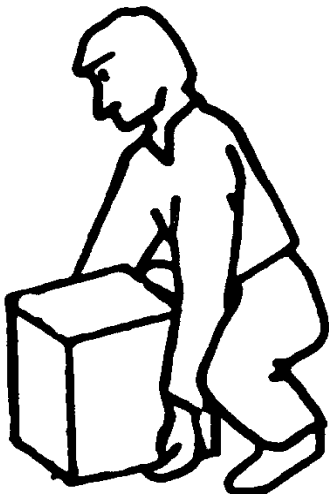


In general, unfamiliar loads should be treated with caution. For example, it should not be assumed that apparently empty drums or other closed containers are in fact empty. The load may first be tested, for example by attempting to raise one end. Force should be applied gradually until either undue strain is felt, in which case the task should be reconsidered, or it is apparent that the task is within the handler's capability

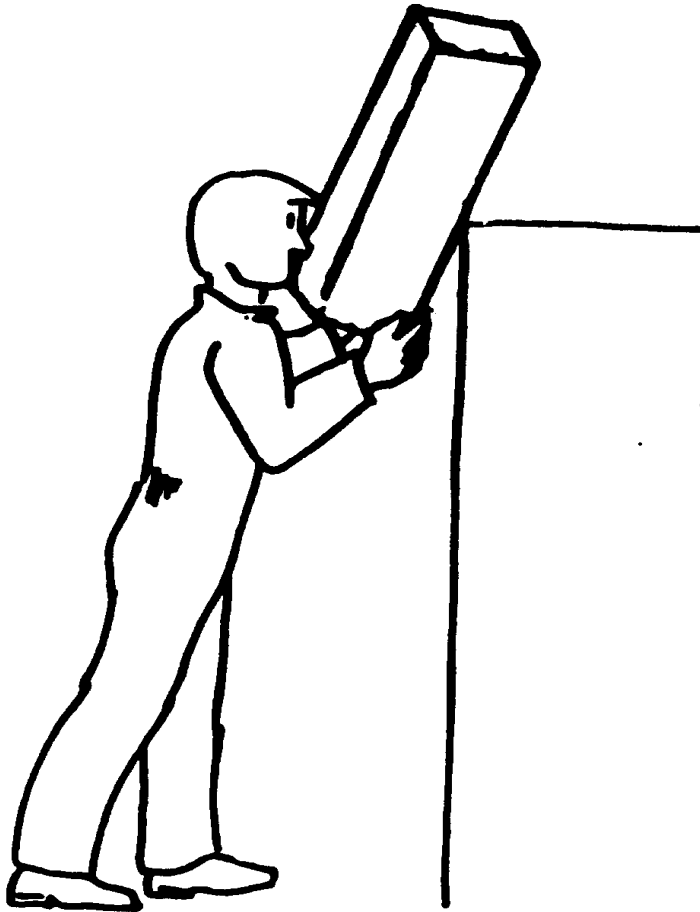
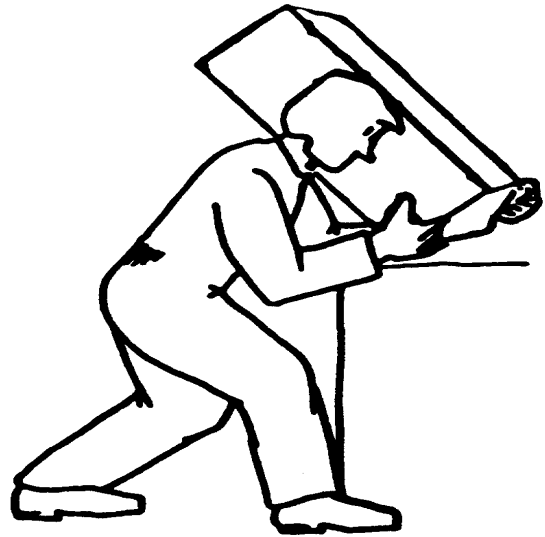
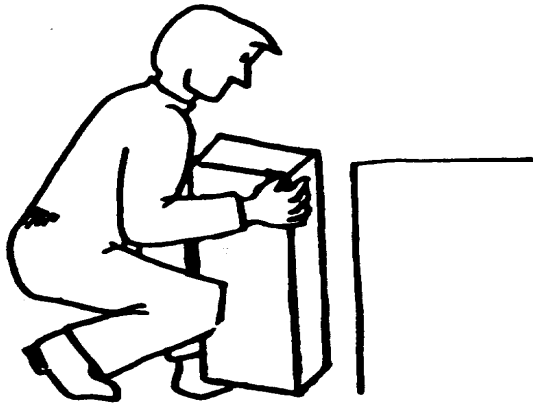


Place the feet apart, giving a balanced and stable base for lifting (tight skirts and unsuitable footwear make this difficult) Leading leg as far forward as is comfortable.

Adopt a good posture. Bend the knees so that the hands when grasping the load are as nearly level with the waist as possible. Do not kneel or overflex the knees. Keep the back straight (tucking in the chin helps). Lean forward a little over the load if necessary to get a good grip. Keep shoulders level and facing in the same direction as the hips. Keep arms as straight as possible. Keep load close to body.



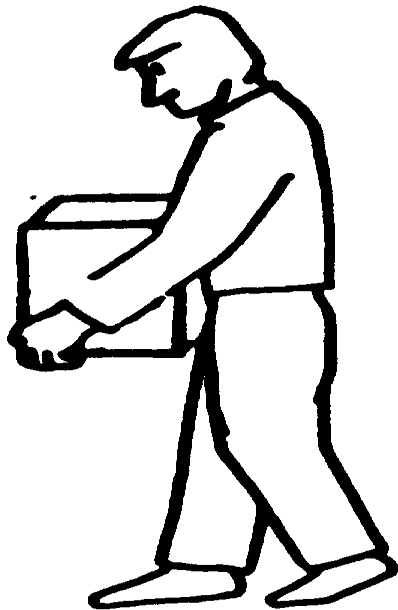
Get a firm grip. Try to keep the arms within the boundary formed by the legs. The optimum position and nature of the grip depends on the circumstances and individual preference, but it must be secure. A hook grip is less fatiguing than keeping the finger straight. If it is necessary to vary the grip as the lift proceeds, do this as smoothly as possible and use a midway stage if possible.



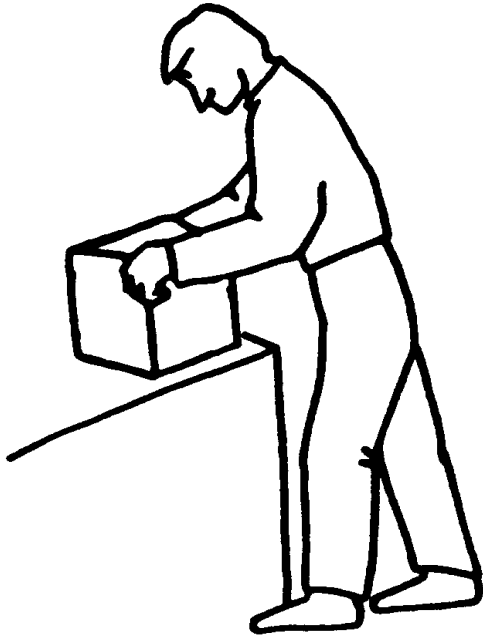
Use of a midway stage to change grip.



Don't jerk. Carry out the lifting movement smoothly, keeping control of the load. The load must not obstruct vision.



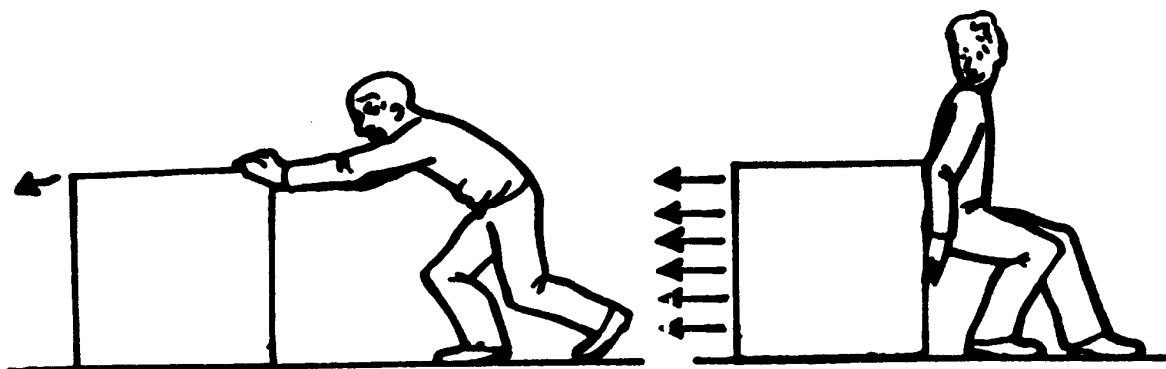
Move the feet. Don't twist the trunk when turning to the side. Keep close to the load. Keep the load close to the trunk for as long as possible. Keep the heaviest side of the load next to the trunk. If a close approach to the load is not possible try sliding it towards you before attempting to lift it. Do not change grip. Ensure you can see where you are going



Bend knees and keep back straight when lowering a load. Keep load close to body. Take care not to squash fingers or toes. Put down, and then adjust. If precise positioning of the load is necessary, put it down first, and then slide it into the desired position. Make sure load is in a safe place.

Pushing and Pulling

- Stay close to load
- Get a good grip
- Straight back, stomach in, knees bent
- Lean in direction of travel
- Chin in
- When pulling, rear foot maintains balance of body
- When pushing, front foot maintains balance of body
- It may be possible to push against load with back to use strong leg muscles



Awkward objects

- Stand over the corner of the load, with feet apart
- Grasp bottom inside and top outside corners
- Bend with knees and use basic lift, keeping the same grip

Lifting to high place

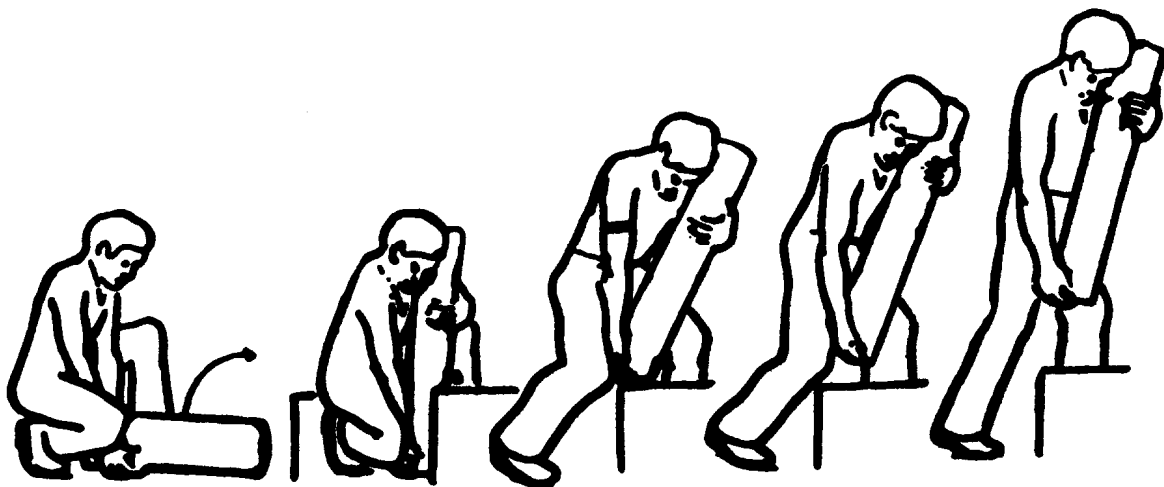
- Lighten the load if possible
- Stand on something sturdy, with one foot in front of the other
- Use a mechanical aid or get help if load is awkward or heavy
- Place on a platform at an intermediate height if possible

Lowering from a high place

- Stand on something sturdy
- Check weight of load
- Stand as close to load as possible
- Grasp load firmly, sliding it down body
- Use a mechanical aid and get help if necessary

Handling ladders, timber, pipes etc

- One end is lifted using basic lift
- Use platform as halfway stage if possible
- Object is raised above shoulder level bending the knees
- Walk forward moving hands along length until it rests on shoulders at a point of good
- Balance
- Alternatively, carry the load by hugging it to the chest

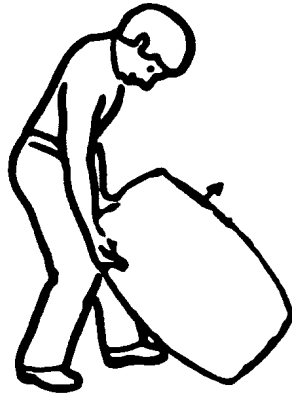


Drums

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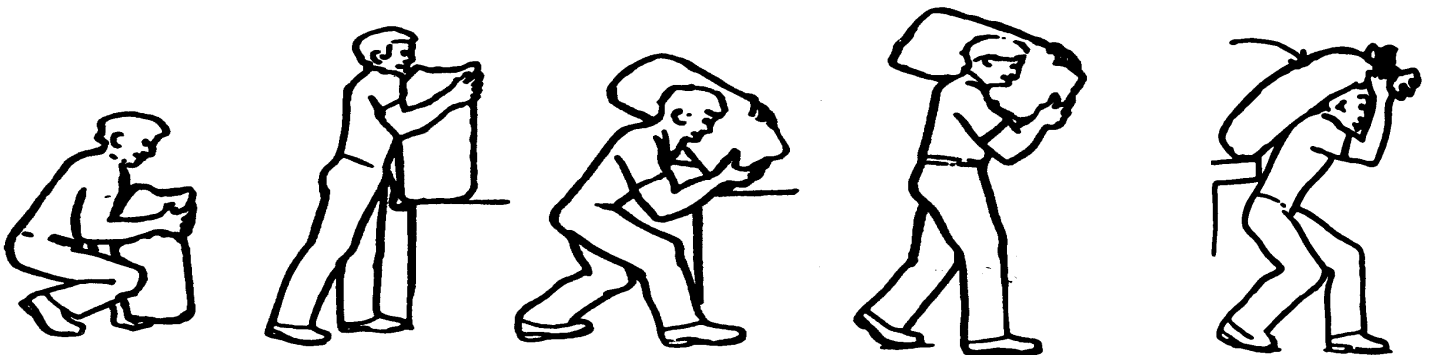
- Find point of balance of drum
- Pull drum towards you using kinetic principles of straight arms and back and bent front leg i.e. Basic lift
- Tilt drum forward by moving weight on to front of leg
- Roll drum along ground

Caution : These loads can suddenly shift



Sacks

- Light sacks can be lifted using the basic lift and carried on the back, on one shoulder
- Clasped, to the front of the body or one under each arm
- Heavier sacks should be lifted thus:-
- Using basic lift, set it upright
- Clasp one hand below sack and other hand clasps sack to body
- Raise sack upright using intermediate platform before raising to shoulder



- Heavier sacks should be carried by:

- Holding at the top
- Bending knees
- Tilting the sack forward
- Straightened legs and moving off
- Heavier sacks should be lowered by:

lowering onto a platform or lowering to floor under control by bending knees and hips and sliding off shoulder.

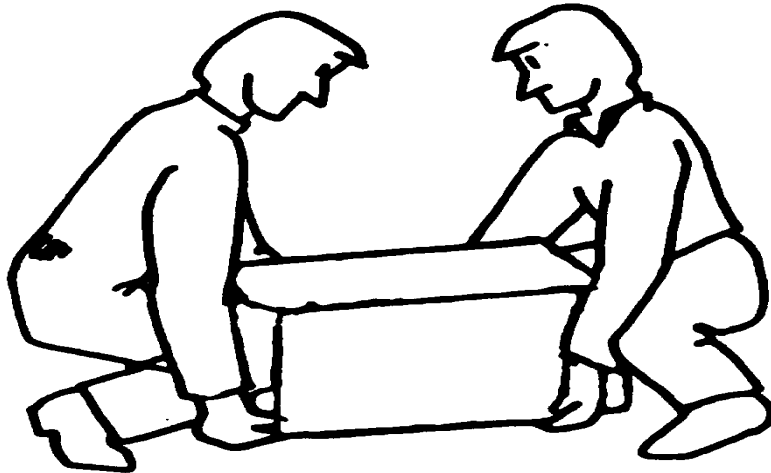
Sheet material

- Sheet material should not be longer than arm span and wider than distance between
- Chest and palm of hand
- Stand close to sheet, bend hips and knees
- Tip sheet to one corner
- Grasp sheet
- Keep head and back straight and lift
- Often necessary to rest load on convenient support to get a better grip before moving
- Off



Team Lifts

- People to be of similar size
- One person calls signals
- Move smoothly in unison
- Follow kinetic principles of basic lifting



Checklist for Safe Lifting

1. Plan the job
2. Examine the object
3. Get a good grip
4. Correct foot position
5. Straight back
6. Straight arms
7. Chin in
8. Bend knees
9. Move smoothly without twisting
10. Lift by straightening legs
11. When lowering load, keep the back straight, bend knees
12. Do not over-reach
13. Allow sufficient rest periods
14. Wear personal protective equipment if appropriate
15. Never lift an object which is too heavy - get help

3.0 General Steps to Reduce the Risk of Injury

Use Mechanical Assistance

Mechanical assistance involves the use of handling aids - an element of manual handling is retained but bodily forces are applied more efficiently, reducing the risk of injury. The aids make the task less physically demanding.

- E.g.
- A lever
 - A hoist
 - A trolley
 - A sack truck
 - A roller conveyor
 - A chute
 - Hand held hoists
 - Suction pads

If available and appropriate to the task in question mechanical aids should be used. However, no-one should use the aids unless properly trained to do so.

Consider Task, Load, Working Environment and Individual Capability

There are four main factors - the task, the load, the working environment and individual capability which must be addressed when carrying out an assessment of a manual handling operation which involves risk of injury and these factors interact. Each factor must be considered when taking steps to reduce the risk of injury.

The following gives advice, which is not exhaustive, on how risk of injury can be reduced in relation to each of the four factors.

The Task - Reducing the Risk of Injury

Task Layout

- Good task layout

- E.g.
- No obstructions
 - Optimum position for storage of loads is at waist height.
 - Distance over which load is carried, lifted or lowered to be kept to a minimum.

Using body more efficiently

- Avoid twisting, stooping or other unsatisfactory movements
- Avoid sudden movement of trunk
- Keep load close to body
- Feet to be below or adjacent to load
- Keep body in stable posture
- Use strong leg muscles when possible
- Push or pull if possible in a controlled manner

Improve work routine

- Minimise need for fixed postures
- Reduce frequency of handling
- Tasks to be self paced if possible
- Provide rest breaks
- Job rotation of workers

Handling when seated

- Avoid lifting loads from floor
- Consider accidental movement of seat
- Swivel-action seat can avoid twisting of trunk
- Relative heights of seats and work surfaces be well-matched

Team handling

- Must be adequate space
- Must be sufficient handholds
- One person to plan and take charge of operation
- Team members of similar height and physical capability

Personal protective equipment (PPE) and other clothing

- PPE and clothing to be well fitting and not restrict movement
- Fasteners, pockets and other features on which loads might snag to be concealed
- Gloves to be close fitting and supple
- Footwear to provide support, stability, non-slip base and proper protection

Maintenance and accessibility of clothing

- All equipment used for manual handling, including handling aids and PPE, to be well maintained
- Equipment to be accessible

The Load - Reducing the Risk of Injury

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Make it lighter

Make it smaller

Make it easier to grasp

E.g. use handle, handgrips, indents etc.

Make it more stable

Make it less damaging to hold

The Working Environment - Reducing the Risk of Injury

Remove space constraints

Consider nature and condition of floors

- Provide flat, well-maintained and properly drained surface
- Spillage of water, oil, food etc to be cleared away properly

Avoid working at different levels

Avoid extremes of temperature

Avoid poor ventilation

Avoid high winds

Ensure adequate lighting

Individual Capability - Reducing the Risk of Injury

Consider

- Pregnancy
- History of back injury, hernia or other injury
- Age
- Training

4.0 Manual Handling Operations Regulations 1992 Record of Risk Assessment

The following link will take you to the Manual Handling Risk Assessment form on the Cardiff Improvement System **4.C.050**

5.0 Further Information:

- Health and Safety Advisers, Corporate Services 02920 872635
- The Manual Handling Operations Regulations 1992 and the associated Approved Code of Practice HSE website
- [Manual Handling Policy 1.CM.112](#)
- [All Wales Manual Handling Passport Scheme](#)
- [Guidelines for Completing the Object Handling Risk Assessment Form](#)
- [Guidance for completing the "Supervisors / Line Managers Manual Handling Monitoring Checklist \(single and multiple tasks\) Forms.](#)
- [Manual Handling Monitoring Checklist](#)

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