



HSA

An tÚdarás Sláinte agus Sábháilteachta
Health and Safety Authority

Guide on Manual Handling Risk Assessment in the Retail Sector

Our vision:

A national culture where all commit to safe and healthy workplaces and the safe and sustainable management of chemicals



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Introduction

The retail sector covers a wide range of different business types including supermarkets, garden centres, clothes shops and many other smaller shopping units. There are approximately 265,000 people working in this industry, which accounts for 14% of the working population. The work tasks conducted in the retail sector require people to engage in many different types of work activity. In some cases this will require a person to engage in a work practice which may involve a significant amount of physical activity. Manual handling is a physical activity which takes place in every workplace and in some cases the activity does not pose a problem; however, it is important to be aware that manual handling can be a potential workplace hazard where the activity requires, for example, a person to handle very heavy loads or lift loads to an unsafe height.

There is a need to provide practical information to the retail sector on useful interventions that can be made in addressing the risk of injury caused by manual handling. The ultimate objective of providing such information is to help businesses to conduct a review of current work activities. Such reviews will help them get a better appreciation of how work is carried out currently and what the potential issues are in relation to

manual handling and the introduction of changes to work activities which would result in better ways of working with reduced exposure to the risk of back injury. The solution introduced can sometimes lead to improved efficiencies, a point illustrated in the case study below:

Case Study: Handling of stock in a medium-sized business

PROBLEM:

A medium-sized retail shop had stock stored in a warehouse at the back of the shop (Figure 1); there was no formal allocation of stock to assigned locations. This resulted in a number of issues, including poor housekeeping, delays in the transfer of stock to the shop floor because of the difficulty in accessing stock and the increased likelihood of an injury caused by poor access and egress, and the handling of loads at an unsafe height.



Figure 1

ACTION TAKEN BY THE BUSINESS:

The employer conducted a full review of how the main work activities were being conducted in order to understand how stock was moved around the site and to identify areas of congestion and consider possible solutions to relieving it.

SOLUTION:

The employer invested in the introduction of simple mechanical aids such as a small racking system and pallet trucks (figure 2), a good housekeeping policy and a stock control system to manage the flow of stock. These interventions improved access and egress and led to safer storage of stock, giving, a number of benefits:

- More efficient flow of stock to the shop floor
- Diminished hazards and reduction of potential for harm
- Better ways of working and improved housekeeping

These changes resulted from the completion of a manual handling risk assessment.



Figure 2

In summary there are a number of reasons why it is good practice to conduct a manual handling risk assessment of specific tasks and these are detailed in the chart overleaf:

Why do we need a task-specific manual handling risk assessment



To learn more about how work is carried out so we can identify potential hazards



To allow employees the opportunity to discuss potential hazards and offer potential solutions



To identify better ways of working with less manual handling



To reduce the potential for injury (particularly back injury or ill health)

This short, practical guide has been prepared to provide guidance on useful interventions that can be made in the retail sector to address the issue of injury caused by manual handling. The guide will aim to:

- Outline briefly the legislation underpinning the need to address manual handling activity in the workplace
- Outline briefly the reasons it is necessary to put improvements in practices in place to avoid or reduce manual handling
- Explain in simple and practical terms the manual handling risk assessment process
- Illustrate through worked examples and case studies how a manual handling risk assessment can be completed

What Legislation Covers Manual Handling?

The Safety, Health and Welfare at Work, (General Applications) Regulations 2007, Chapter 4 of Part 2 (S.I. no. 299 of 2007) outline the requirements that must be fulfilled in relation to manual handling. Further information is available at **www.hsa.ie**

The Regulations set out a framework to help employers avoid or reduce the risk of injury resulting from manual handling activities. The basic principle enshrined in this Part is that where manual handling of loads which involves a risk of injury (particularly to the back) is present, the employer must take measures to avoid or reduce the need for such manual handling.

There are three key requirements in these Regulations and they are:

1. Avoidance of Manual Handling activities which involve a risk of injury
2. Reduction of Manual Handling activities which involve a risk of injury
3. Risk Assessment of Manual Handling tasks

At the outset the employer will need to carry out a full risk assessment of existing manual handling tasks before making an informed decision on what manual handling tasks need to be avoided or reduced. Employers must assess their manual handling operations and take steps to avoid or reduce the risk of injury.

Why is it Necessary to put Improvements in Place to Avoid or Reduce Manual Handling?

There is a definition of Manual Handling in Regulation 68 of the Safety, Health and Welfare at Work (General Application) Regulations 2007:

*Manual Handling involves any transporting or supporting of any load by one or more employees, and includes lifting, putting down, pushing, pulling, carrying or moving a load, **which by reason of its characteristics or unfavourable ergonomic conditions, involves risk, particularly of back injury, to employees.***

The characteristics of a load that needs to be handled which can contribute to the risk of back injury can include excessive weight, size or unwieldy or awkward shape. An example of a characteristic of a load which involves risk would be a heavy box with a weight of 40kg plus.

An example of an unfavourable ergonomic condition would be the physical strain involved in having to lift such a load down a stairwell.

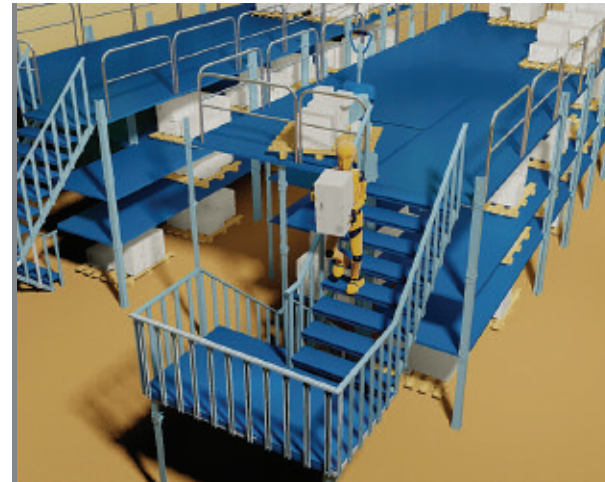


Figure 3

Why is it Necessary to put Improvements in Place to Avoid or Reduce Manual Handling?

In the example in Figure 3, a heavy load is being moved manually down a stairwell. It is an example of a manual handling activity that would need to be addressed as part of a risk assessment process.

The questions should also be asked if is this the most efficient way to move stock around the site and can we find better ways of doing this task. The risk assessment process should be viewed as a problem solving tool as opposed to a tool creating problems. It should be seen as a tool for improvement. The information collected as part of an effective risk assessment is valuable in that it gives you information on how you currently conduct operations or work activities with a view to making improvements.

Many of the problems that cause back pain are the result of injury and degeneration of the intervertebral discs. Degeneration is a process where wear and tear causes deterioration. The disc is subjected to different stresses and acts as a shock absorber.

An intervertebral disc sits between each individual vertebra in the spine; the disc is a large round ligament that connects the vertebrae together.

Bending over results in compression of the disc, and may also cause the disc to bulge backwards towards the spinal canal and nerves. Twisting and bending together is perhaps the greatest stress on the spine, especially the disc.

Figure 4 illustrates further examples of unfavourable ergonomic conditions which present a risk of injury.

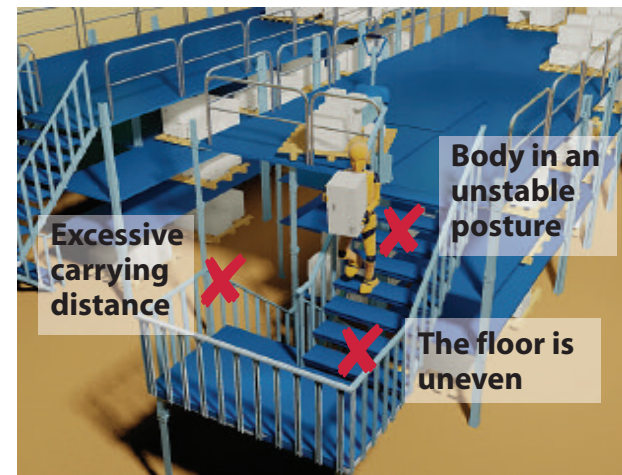


Figure 4

Why is it Necessary to put Improvements in Place to Avoid or Reduce Manual Handling?

Below are examples of how unfavourable ergonomic conditions can contribute to back injury:

- Gradual wear and tear caused by frequent or prolonged periods of manual handling activity
- Increased wear and tear or sudden damage caused by intense or strenuous manual handling or awkward lifts
- Strain on the back caused by bending or reaching forward
- Injury to the lumbar spine which may result from movements during handling such as repetitive back bending, pulling and lifting from overhead, or forward bending and twisting

It is important to have an understanding of the type of work that is carried out in your workplace. It is likely that it would not take very long to identify manual handling tasks taking place which would need to be addressed as part of the risk assessment process. In trying to identify the manual handling tasks that need to be assessed, it is always a good idea to consult with as many people as possible, particularly those who currently conduct the work.

The Manual Handling Risk Assessment

As a first step it is important to conduct a walkthrough of the workplace and put together a list of work activities which involve significant manual handling. In completing this walkthrough, it is important to consult with the people who do the job as they are best placed to explain how the job is carried out. There are five stages in a manual handling risk assessment process and these are explained below. (Refer to Appendix 1 for an example of a Manual Handling Risk Assessment Worksheet):

STAGE 1: HOW IS THE MANUAL HANDLING TASK CARRIED OUT?

This will involve collecting information on how the task is performed and identifying the key stages in the task. This should be a team effort involving consultation with those that normally do the job. The person carrying out the assessment should have a thorough practical understanding of the type of manual handling tasks being carried out.

STAGE 2: COLLECT ALL TECHNICAL DETAILS

It is important to collect good quality information about the task, including technical and general information. Technical information may include information on the load weight and its size, the number of manual lifts required to complete a task, the physical dimensions of a work area and general information on the work environment.

It is always good practice to take photographs of the work task as it makes it easier to visualise potential hazards. All this data can be collected while observing the task, and you can then sit down with others to write up all the relevant information.

Remember that the information that you collect at this stage in the risk assessment process is critical to understanding whether or not there are manual handling risk factors that will need attention.

STAGE 3: IDENTIFY THE PROBLEMS OR RISK FACTORS THAT NEED TO BE IMPROVED

We have already discussed risk factors which can contribute to the risk of back injury such as load characteristics and unfavourable ergonomic conditions. Schedule 3 to the Safety, Health and Welfare at Work, (General Applications) Regulations 2007, Chapter 4 of Part 2, details these risk factors (refer to Appendix 2 for examples of some of these risk factors).

At this stage of the risk assessment process you need to refer to this Schedule in order to determine if any of the risk factors detailed in the Schedule exist in the work task being assessed. The Health and Safety Authority has published guidance titled "Management of Manual Handling in the Workplace" which explains all the risk factors in Schedule 3, it is important to refer to this guidance for help in deciding whether or not certain risk factors are present. In the example in Figure 5 and 5.1, an employee is handling stock in a poorly organised stock room.

There are a number of risk factors identified and these include:

- Body in an unstable posture
- Load being difficult to grasp
- Sudden movement of the load
- Being prevented from handling at safe height



Figure 5

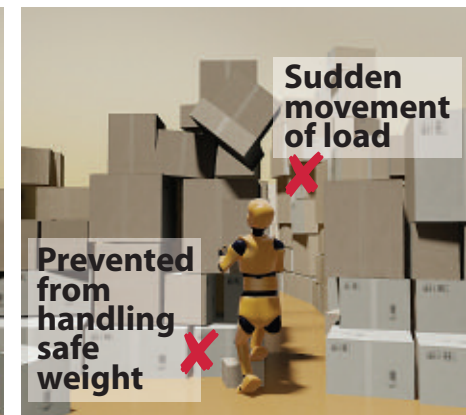


Figure 5.1

Once these risk factors are identified, it is necessary to investigate potential solutions.

STAGE 4: WHAT IMPROVEMENTS CAN WE PUT IN PLACE?

Efforts should be made to investigate if the work activity can be organised to allow the use of mechanical or other means to avoid or reduce the need for the manual handling of loads by employees in the workplace. It is necessary to evaluate the controls that are feasible for each problem. The rationale for deciding on a control measure must be clearly documented, it should outline why other control measures are not possible and how the suggested control measure will avoid or reduce risk of injury.

At this stage in the process it is important to ask yourself why you are doing this risk assessment, valid reasons include:

- To learn more about how manual handling tasks are currently carried out in order to identify potential hazards or risk factors
- To identify better ways of working with less manual handling and more effective ways of moving stock
- To reduce the potential for injury (particularly back injury) or ill health

Consultation is necessary at this stage to ensure that all parties are working together to determine whether the recommended control measures are practical, to elicit feedback on other possible controls and to ensure the effective implementation of a plan of action. The introduction of any control measure such as a mechanical aid or a new work layout means the introduction of a new way of working. Therefore the new way of working must also be assessed to ensure that any new hazards are identified and controlled. Finally, a plan of action must be put in place to identify what changes are planned, to allow people time to adjust to the changes and to communicate the changes to all relevant personnel.

Examples of some control measures or improvements that could be put in place to produce better ways of working are laid out in the following non-exhaustive list:

- Introduction of a mechanical handling device to transfer stock
- Introduction of housekeeping policies to ensure that work areas are tidy and have better access
- Maintenance of floor areas and repair of chipped floorways

- Relocation of stock to reduce travel distance when handling stock
- Introduction of appropriate stock control system to reduce time spent looking for stock and double handling
- Introduction of safe racking system for stock storage
- Compilation of short standard operation procedures documents to give instruction on safe handling of stock
- Appropriate training in the safe use of handling aids
- Consultation with planning and purchasing staff to ensure that warehouse areas are maintained effectively and congested warehouses are the exception rather than the norm
- Regular maintenance of handling aids

The case studies in the next section of this guide illustrate some examples of work practices that exist in many retail organisations. The section does not intend to represent all types of work practice. It merely aims to illustrate the process of risk assessment which can be applied to investigation of any work task in the retail sector which includes a significant level of manual handling.

STAGE 5: REVIEW THE EFFECTIVENESS OF THE CONTROL MEASURES OR SOLUTION

Effectiveness is the degree to which the control measures have avoided or reduced the risk of injury. This will depend on how swiftly the changes were implemented and the level of worker acceptance. In figure 6 below, a handling aid has been introduced to allow the safe handling of a very heavy load. The staff have been given instructions on the safe use of the handling aid.



Figure 6

The Benefits of Manual Handling Risk Assessment

The manual handling risk assessment uses a step-by-step method to gather key information about how tasks are completed and to ensure that key technical information is also collected. Only by doing this can the assessor make an informed and objective decision on the potential risk factors that exist. The assessor will also have a better understanding of how the work activities are conducted at the actual work area; this in itself will allow the assessor to talk to the workers in the area and start to develop ideas for possible interventions or improvements that could be put in place. Below are some of the key benefits of manual handling risk assessment.

The benefits of manual handling risk assessment



Problem solving tool



Better way of working



Less manual handling



Good housekeeping



Reduced risk of injury



Manual Handling Risk Assessment Case Studies

This section of the guide aims to demonstrate the application of the five-step manual-handling risk assessment process with the use of case studies specific to the retail sector. This is not an exhaustive list of work activities that may need to be assessed. The case studies illustrate the importance of following a logical step-by-step process in order to:

- Fully understand how a work activity is completed
- Be aware of the technical aspects of the activity including weight, posture, environment, etc
- Be able to clearly identify the potential risk factors in the activity
- Be able to make an informed decision based on the facts collected as to the best approach to take to avoid or reduce the manual handling tasks within the work activity

The solutions in these case studies are not exhaustive and it may be feasible to develop an alternative solution for the specific needs of the business which still does not impact on the health of the people involved in the handling activity. The case studies are presented in a matrix format so that it is clearly visible what information needs to be collected at each step in the risk assessment process. Below is a summary of key tips for conducting task-specific manual handling risk assessments:

The stages of manual handling risk assessment

Stage 1: What is the task at hand?



Describe in your own words how the job is carried out

Stage 2: What is the task's technical details?



Identify key information including the load weight, the dimensions of the load the number of handling tasks, the carrying distances, details on the layout of the work area, etc.

Stage 3: What are the task's risk factors



Review information collected above, detail any risk factors, and document these risk factors with any explanation e.g. the load handed weighs 45kg and is too heavy

Stage 4: How can you improve the way the work is carried out?



Use the risk assessment to identify the opportunities for better ways of working, explore possible solutions, talk to staff, and agree on the improvements to put in place

Improvements could include the use of mechanical aids, reorganisation of work area to reduce carrying distances or improve access

Stage 5: Are the improvements effective?



Make sure clear instructions are in place for the new system of work and that any new hazards have been minimised or eliminated

Case Study A: Handling pallets in a goods yard

STAGE 1: TASK DESCRIPTION

The employee stacks pallets to a height in an area outside the main warehouse



STAGE 2: COLLECT ALL TECHNICAL DETAILS

- The employee lifts pallets onto a stack of pallets in the goods yard
- The pallets are large and bulky

- The pallets are stacked very high
- There is repetitive transfer of pallets
- The pallets measure approximately 1200mm x 1000mm
- The employee has to engage in an awkward posture when handling the pallets

STAGE 3: IDENTIFY THE RISK FACTORS

- The pallets are too heavy and too large
- The pallets are very difficult to grasp
- The physical effort required is too strenuous given the weight of the pallets and the unsafe height from which they are lifted
- The pallets are manipulated at a distance from the trunk
- The physical effort is made with the body in an unstable posture
- The pallets are lifted at an unsafe height

STAGE 4: IDENTIFY THE IMPROVEMENTS TO BE PUT IN PLACE

- Stack pallets to no more than height indicated
- Use hand pallet truck to transfer the pallets to the yard
- Ensure two people together use team lift to get the pallet into position
- Complete team lift with good communication and co-ordination

STAGE 5: REVIEW EFFECTIVENESS OF THE SOLUTION



Case Study B: Handling heavy loads at a supermarket checkout

STAGE 1: TASK DESCRIPTION

The customer brings a shopping trolley to checkout and lifts an eight pack of bottled water out of the trolley and places it on the checkout counter. The checkout assistant reaches over and lifts the eight pack of bottled water and holds the load in mid-air until he/she can scan the product



STAGE 2: COLLECT ALL TECHNICAL DETAILS

- The product is an eight pack of bottled water which is a heavy load

- The lifting activity is carried out while checkout operative is sitting
- The checkout assistant has to manipulate the load in mid-air while trying to find the barcode in order to scan the product
- The load is lifted a number of times

STAGE 3: IDENTIFY THE RISK FACTORS

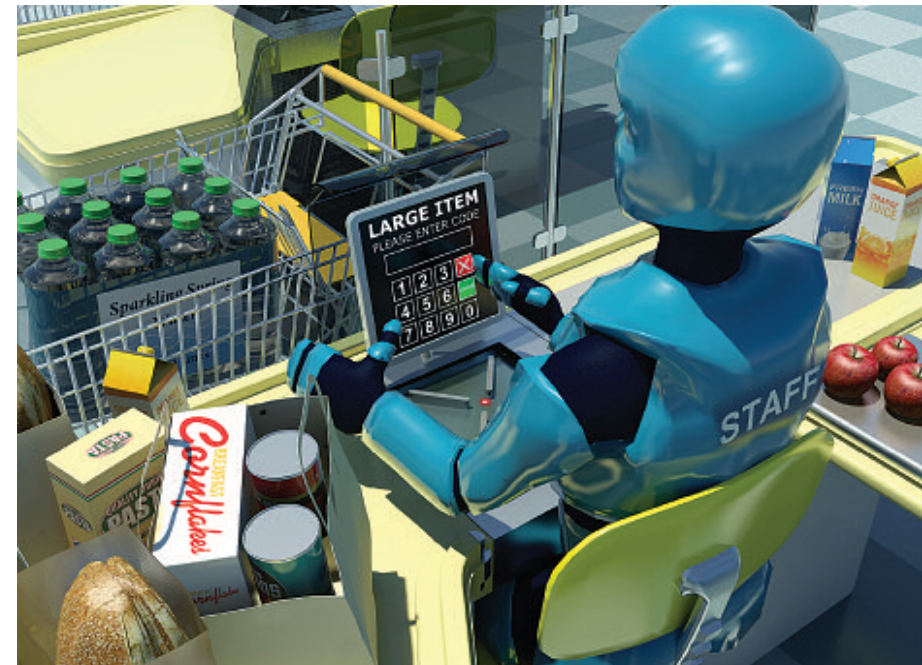
- The load is too heavy and is difficult to grasp
- The checkout assistant, who is sitting down, engages in an awkward posture when reaching to retrieve the product
- The physical effort is too strenuous because the load has been manipulated and held in mid-air when trying to scan product
- The load is manipulated at a distance from the trunk
- The physical effort is made with the body in an unstable posture
- The environment prevents the handling of the load with good posture

Case Study B:
Handling heavy loads at a supermarket checkout

STAGE 4: IDENTIFY THE IMPROVEMENTS TO BE PUT IN PLACE

- Introduce new technology to allow checkout assistant type in a code instead of having to scan the product, or the Checkout Assistant comes around to the trolley and uses a mobile scanner to scan product. As a consequence the product does not have to be lifted out of the trolley

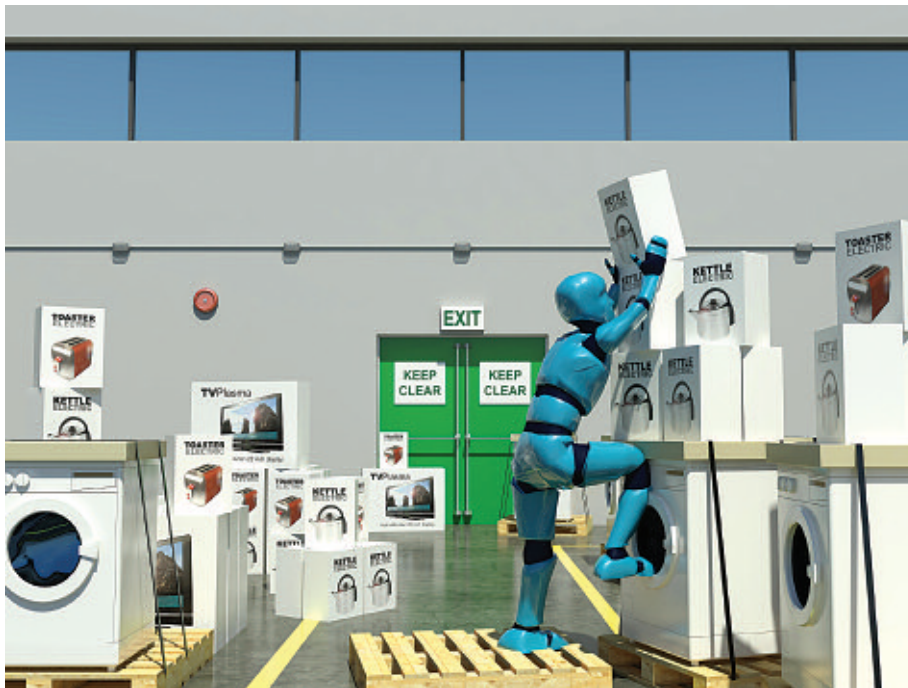
STAGE 5: REVIEW EFFECTIVENESS OF THE SOLUTION



Case Study C: Handling loads in a warehouse area

STAGE 1: TASK DESCRIPTION

The employee has to retrieve stock from different areas of the warehouse



STAGE 2: COLLECT ALL TECHNICAL DETAILS

- The product is stored on the floor resulting in trip hazards
- There is poor access and egress in warehouse
- The employee has to climb onto washing machine to access stock stored at height resulting in awkward posture when lifting and controlling the load

STAGE 3: IDENTIFY THE RISK FACTORS

- The body is in an unstable posture when climbing onto washing machine to access stock
- There are some heavy loads stored on the floor which are too heavy and could result in strenuous effort as load would have to be manipulated at a distance from the trunk or with a bending posture
- There are trip hazards and product stored in front of emergency exits
- The employee does not have any handling aid for transferring stock, resulting in excessive lifting and/or carrying distances

STAGE 4: IDENTIFY THE IMPROVEMENTS TO BE PUT IN PLACE

- Introduce a proper racking system to store stock
- Use pallet truck to move a pallet of stock

STAGE 5: REVIEW EFFECTIVENESS OF THE SOLUTION



Case Study D: Handling televisions on shopfloor

STAGE 1: TASK DESCRIPTION

A large boxed television is stored at a height in racking on the shopfloor. The employee reaches up to pull out the box and then lifts the box from the racking and carries the box to checkout



STAGE 2: COLLECT ALL TECHNICAL DETAILS

- The weight of boxed television is 33kg

- There is awkward posture when lifting and controlling the load at a height
- The boxed television is carried over a long distance (>20m) to the checkout
- The load is lifted a number of times by the employee

STAGE 3: IDENTIFY THE RISK FACTORS

- The load is too heavy (weight of load 33kg) and too large
- The load is unwieldy and difficult to grasp
- The physical effort is too strenuous as the load has to be manipulated above shoulder height
- The physical effort is made with the body in an unstable posture
- There are excessive carrying distances

STAGE 4: IDENTIFY THE IMPROVEMENTS TO BE PUT IN PLACE

- Reorganise the stock of boxed televisions to allow these units to be stored at a safe height
- Ensure the boxed television is transferred from the racking onto a trolley by two employees
- Provide trolley with an adjustable table to allow transfer of loads from different heights
- Ensure that one employee then pushes the trolley to checkout and calls out the barcode number to the checkout cashier

STAGE 5: REVIEW EFFECTIVENESS OF THE SOLUTION



Case Study E: Home deliveries

STAGE 1: TASK DESCRIPTION

An employee manually carries boxes of home deliveries from the stores to the van and places the boxes outside the van. The employee then lifts a box and climbs into the van while carrying the load and places the load into position in the van.



STAGE 2: COLLECT ALL TECHNICAL DETAILS

- The home delivery boxes are carried over a distance from the stores to the van

- The activity is repeated for each transfer of a load to the van
- The employee has to move vertically from street level into the van while holding a load
- The loads are lifted from the stores to the street level and then into the van

STAGE 3: IDENTIFY THE RISK FACTORS

- The activity involves over-frequent physical activity as there is unnecessary repetitive handling of each home delivery box when lifting to the van and then lifting from van floor to its location
- Some of the loads may be too heavy to carry over a long distance
- The physical effort is made with the body in an unstable posture when transferring the load to the van
- There are variations in the level of the floor
- The loads are manipulated at a distance from the trunk

STAGE 4: IDENTIFY THE IMPROVEMENTS TO BE PUT IN PLACE

- Ensure that home delivery boxes are stored at a safe height in the stores
- Provide a sack truck to transfer home delivery boxes from the stores to the van
- Source a mobile, foldable, loadable ramp
- Ensure the employee transfers four home delivery boxes onto a sack truck and checks they are secured properly
- The employee puts the ramp into position between the van and the ground. ensure it is properly fixed into position and secure
- Ensure that using the sack truck the employee transfers the home deliveries from the stores, up the ramp and into the van

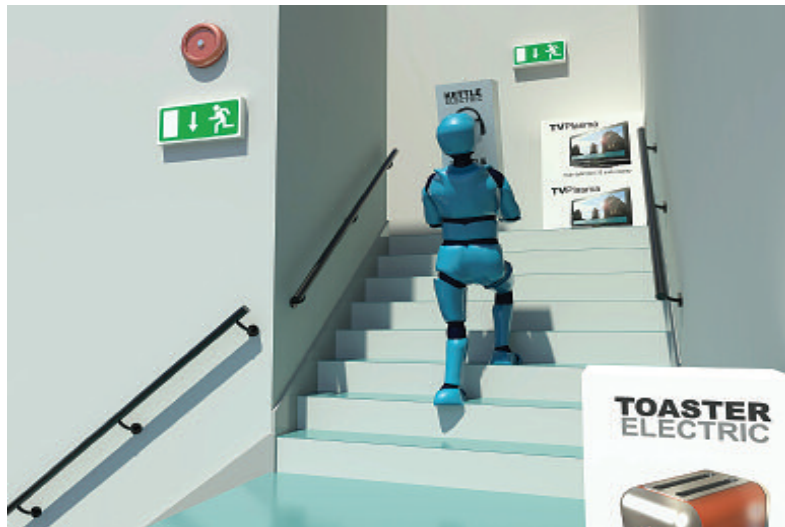
STAGE 5: REVIEW EFFECTIVENESS OF THE SOLUTION



Case Study F: Handling stock on a stairwell

STAGE 1: TASK DESCRIPTION

An employee manually lifts product while travelling on a stairwell. Employee uses both hands to maintain a grip on the load.



STAGE 2: COLLECT ALL TECHNICAL DETAILS

- The load is transferred manually while travelling on a stairwell
- The load is carried over a distance

- The load has to be manipulated a number of times while on the stairwell to try and ensure a safe grip of the load
- There is limited visibility when handling such a large load on a stairwell and there are a number of obstacles on the stairwell

STAGE 3: IDENTIFY THE RISK FACTORS

- The load is manipulated at a distance from the trunk
- Carrying distance is excessive
- The physical effort is likely to result in a sudden movement of the load
- The load can be difficult to handle and difficult to grasp while on the stairwell
- There is over-prolonged physical effort
- The physical effort is made with the body in an unstable posture
- The floor is uneven and there are variations in its level

STAGE 4: IDENTIFY THE IMPROVEMENTS TO BE PUT IN PLACE

- Source a stair climber and ensure the load is secured on the stair climber and the employee guides the load on the stairwell
- Train employees in the correct and safe use of the new lifter
- Keep access routes on the stairwell clear at all times

STAGE 5: REVIEW EFFECTIVENESS OF THE SOLUTION



Case Study G: Handling fruit on the shopfloor

STAGE 1: TASK DESCRIPTION

An employee removes empty container from display area and places it on the floor. The employee lifts a full container from the base of pallet and places into position on the display area



STAGE 2: COLLECT ALL TECHNICAL DETAILS

- The full container is made up of punnets of fruit

- Full boxes are stored at base of pallet
- There is awkward posture when lifting and controlling the load when transferring full container to the display area
- The empty container on the floor presents a trip hazard
- The employee has to manipulate the load away from the body when positioning the full box in the display area

STAGE 3: IDENTIFY THE RISK FACTORS

- The load is too heavy when lifting the load away from the body
- Handling with good posture is prevented
- The load is manipulated at a distance from the trunk
- There is likelihood of a physical effort requiring a twisting movement of trunk when moving the load from pallet to the display area

STAGE 4: IDENTIFY THE IMPROVEMENTS TO BE PUT IN PLACE

- Provide a foot operated hydraulic platform truck or a small trolley with proper braking system
- Transfer full containers of fruit to this platform truck or trolley to allow the load to be handled at a safe working height
- Ensure the trolley or truck is moved to the fruit and vegetable area
- Ensure the employee transfers the punnets of fruit to the empty container in the display area or ensure the employee removes the empty container from the display area and places it on the platform truck/trolley, he/she can then lift the full box into position in the display area. In this situation the company needs to develop a company policy that the weight of the boxes are reduced

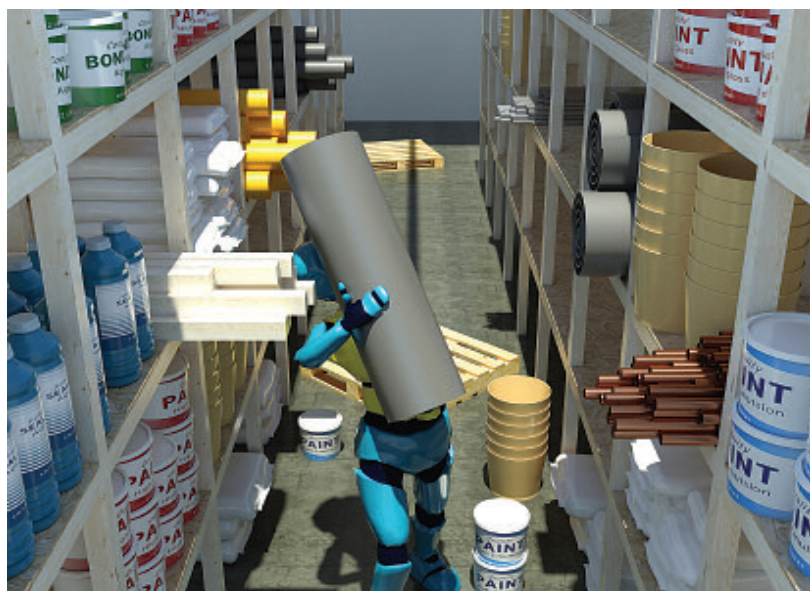
STAGE 5: REVIEW EFFECTIVENESS OF THE SOLUTION



Case Study H: Handling stock in a congested stores area

STAGE 1: TASK DESCRIPTION

An employee engages in regular and unavoidable activity that can involve repetitive lifting, lowering, carrying and moving.



STAGE 2: COLLECT ALL TECHNICAL DETAILS

- Heavy items stored above shoulder height in the stockroom which are required frequently

- The weight of some items is unknown and they are often heavier than expected for their size and shape
- Some loads are double handled
- There is very little access room to allow safe handling
- The stock is not stored in an appropriate manner in the aisles
- There are trip hazards on the floor

STAGE 3: IDENTIFY THE RISK FACTORS

- The loads are too heavy to handle above shoulder height and the loads are manipulated at a distance from the trunk
- The trip hazards result in physical effort being made with the body in an unstable posture
- In some cases there is likely to be a sudden movement of a load when handled because of the lack of information on its weight or because stock is not being stored securely

Case Study H:
Handling stock in a congested stores area

- There are excessive lifting distances which prevent some loads being handled at safe height
- Owing to the lack of good access there is the likelihood that loads will be positioned in a manner requiring the bending or twisting of the trunk

STAGE 4: IDENTIFY THE IMPROVEMENTS TO BE PUT IN PLACE

- Eliminate double handling by minimising the amount of stock stored so that items can be placed directly onto shopfloor or ensure that heavier loads are shipped directly to customer from a central warehouse after purchase
- Organise storage so that heavier items which are in demand are stored at waist height
- Introduce a housekeeping audit system to ensure that access routes are kept clear at all times and that the area around stock is kept clear to allow safe handling

- Work with suppliers to ensure that there is an indication of the weight detailed on loads which might present a risk of injury

STAGE 5: REVIEW EFFECTIVENESS OF THE SOLUTION



Further Information

All the publications listed below can be downloaded from **www.hsa.ie**

- Management of Manual Handling in the Workplace
- Manual Handling Risk Assessment Case Studies
- Guidance on the Manual Handling of Loads Regulation

APPENDIX 1: Manual Handling Risk Assessment Worksheet

Step 1: How is the task carried out?



Step 2: What are the technical details of the task?



Step 3: What are the problems/risks?
(Refer to Schedule 3 in SI No. 299 of 2007)



Step 4: What improvements can be made (actions that can be taken to avoid/reduce handling)?



Step 5: Are the improvements effective?




APPENDIX 2: Examples of Risk Factors for Manual Handling of Loads

As part of the five-step manual handling risk assessment process, it will be necessary to identify the risk factors which are relevant to a particular task. This checklist is a useful aide-memoire to identify risk factors as part of the risk assessment process. The information collected can then be used to identify what improvements can be put in place to avoid or reduce manual handling in a task.

Risk Factors	Yes	No	Comment
Is the load too heavy?			
Is the load too large?			
Is the load unwieldy or difficult to grasp?			
Is the load manipulated at a distance from the trunk?			
Is the load positioned in a manner requiring the bending or twisting of the trunk?			
Is the physical effort too strenuous?			
Is the physical effort only achieved by a twisting movement of the trunk?			
Is the physical effort required likely to result in a sudden movement of the load?			

Risk Factors	Yes	No	Comment
Is the physical effort made with the body in an unstable posture?			
Is there enough room, particularly vertically, to carry out the activity?			
Is the floor uneven?			
Does the place of work prevent handling of the load at a safe height or with good posture?			
Are there variations in the level of the floor?			
Is the floor or footrest unstable?			
Does the activity involve over frequent or over prolonged physical effort?			
Are there excessive lifting, lowering or carrying distances?			



*Working to
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