Introduction

Manual handling requires the use of force exerted by a person in activities involving lifting, lowering, pushing, pulling, carrying, moving, holding or restraining. It may also include stretching and bending, sustained and awkward postures, and repetitive movements. Manual handling can result in musculoskeletal injuries to workers.

The ‘National Code of Practice for Manual Handling’ provides guidance on how PCBUs (Employers) and Workers (Employees) can meet the requirements of the ‘National Standard for Manual Handling’. The standard and code provide the basis for regulations now in force in all states and territories of Australia.

It is practical guidance material and provides assistance for managing manual handling hazards. It outlines how PCBUs (Employers), in consultation with those performing the tasks, should manage manual handling risks by:

- identifying possible problems
- assessing the risks
- eliminating the problem or providing mechanical assistance or lifting aids
- training workers in safer work practices
- monitoring and reviewing the improvements.

PCBUs (Employers) must be able to show evidence of the following in order to fulfill legislative requirements in relation to manual handling in their workplace:

- all the risks arising from manual handling have been identified, assessed and controlled
- all steps have been taken to ensure, as far as possible, that all equipment and containers are without risks to health and safety when manually handled
- work practices and manual handling activities are designed to be safe and without risk to health and safety
- there has been consultation with Workers (Employees), particularly in regard to risk identification, assessment and control methods
The PCBU’s (employer) duty of care covers all staff, contractors, volunteers and visitors to the workplace. In order to meet the requirements of the national standard, it is essential that the employer involve all staff and other Workers (Employees) in identifying manual handling hazards, and in assessing and controlling the associated risks.

Ongoing evaluation and monitoring of controls to determine their effectiveness is another essential part of this approach.

**Manual Handling Injuries**

Back pain is the most common incident of reported manual handling injury. Other injuries, such as strains and sprains to the shoulders, neck, knees and ankles, can also result from manual handling.

The problem of back injury caused by manual handling is difficult to control because of the many factors that may contribute to back injuries.

The following factors are thought to increase the risk:
- heavy physical activity
- repetitive movement
- static posture
- frequent twisting of the trunk
- movements requiring the exertion of force

Back pain arises from damage or strain to the structures in the back, including the spine and the muscles. This damage often results from an accumulation of strains placed on the back over time.

Other potential manual handling risks to consider at your workplace.
Workplace / workstation layout

Risk raising factors:
- Reaching above shoulder height or below mid thigh
- Poor positioning of tools controls, equipment or other materials
- Confined working positions or cramped workspace
- Objects that limit feet and leg movement and are held away from the body

Work environment

Risk raising factors:
- Slippery or uneven floors and rough ground
- Cluttered, confined workspaces
- Vibrating machinery
- Inadequate lighting
- Hot and cold environments

Hazard identification

By law hazards must be identified in your workplace or when using equipment for the first time, before or during changes to plant and work practices, while work is being conducted, and when relevant information becomes available.

All manual handling activities involve a risk of injury, and these need to be understood and controlled in the workplace.

A survey all staff and other Workers (Employees) about which tasks they think are hazardous and what the associated risks might be is a good strategy. Their responses will provide a list of tasks that require risk assessment.

It may be necessary to develop criteria to assist in the ranking of each task in terms of severity of injury and the probability of an injury occurring each time the task is performed. Other sources of information would be any injury records kept by the employer and information gathered by observation.

When assessing manual handling risks, the following factors should be considered:
- actions and movements (including repetitive movements)
- workplace and workstation layout
• working posture and position
• duration and frequency of manual handling
• load location and distances moved weights and forces
• characteristics of loads and equipment
• work organisation
• work environment
• age of persons involved
• skills and experience of persons involved
• clothing worn
• special needs of workers
• other factors relevant to the task or situation when manual handling arises

Examples of manual handling tasks that may pose a risk to persons in a workplace, such as a school include:
• carrying projectors, computers or other electrical equipment
• arranging the stage or moving or erecting props for drama performances and school musicals
• installing and lifting large items of equipment or machinery in wood workshop areas
• moving or re-arranging seating or other furniture for events such as school assemblies
• arranging, carrying or storing sports equipment on sports days and carnivals
• carrying musical instruments for musical performances
• carrying boxes of reference or text books to classrooms for distribution to students
• lifting and moving heavy or awkward materials in workshops
• carrying boxes or trays of food items for the canteen
• carrying deliveries of stocks such as paper and other stationery goods

Safety at Work in Australian Workplaces

Eliminating or Controlling Risks

If the risk assessment shows that there is a risk of injury, it needs to be eliminated or controlled.

Eliminating hazards is the most effective way to make the workplace safer. Ensure that objects and work practices are designed to
eliminate risk and that the working environment is designed to be consistent with the safe handling of objects.

If the hazard can't be eliminated - control it. To minimise the risk to the lowest level 'reasonably practicable', strategies would include:

- substitute the hazard with a hazard that gives rise to lesser risk - eg. use 20 kg bags of cement instead of 40 kg bags
- isolate the hazard from the person put at risk - eg. use remote-handling techniques
- minimise the risk by engineering means - eg. provide adjustable workstations to avoid unnecessary reaching or bending
- minimise the risk by administrative means - eg. introduce job rotation, implement a safe lifting policy, provide appropriate training
- provide PPE - eg. non-slip footwear to prevent slips, trips and falls while performing manual handling activities.

If no single measure can control the risk, use a combination of measures. If it is not reasonably practical to eliminate a risk arising from manual handling, the work activity needs to be re-designed to control the risk and, if necessary strategies might include: modifying the design of the objects to be handled or the work environment, providing mechanical aids or make arrangements for team lifting, ensuring that the people carrying out the activity are trained in manual handling techniques appropriate to the activity.

Eliminating a manual handling risk with a difficult or jammed filing cabinet drawer might be achieved by fixing it so it can be opened and closed with ease.

If a step in a doorway is proving an obstacle to the smooth movement of trolleys, an action that could be taken is providing a small ramp.

**Improved Design**

The "design" of tasks simply means what is done, and how.

"Re-designing the task", means finding an alternative way to get the task done. Some examples of task or equipment re-design include:

- providing a ‘goods receiving bench’ on which incoming supplies can be placed rather than placing them on the floor
- enlarging the door openings of workshop storerooms in which bulky materials are kept
- attaching handles to boxes used to carry books or other equipment to make them easier to carry
- using trolleys to move heavy or awkward loads such as staging components

**Training**

Staff and other Workers (Employees) should be encouraged through
suitable training to get help when a load is too large, too awkward or otherwise difficult to move on their own.

Training should encourage staff to identify manual handling problems and suggest solutions that might enable the task to be done in another way that places less strain on the body.