

Control of Musculoskeletal Injuries

Thousands of workers suffer painful injuries while performing manual work. Most manual handling injuries result in back pain or injury. A manual handling injury may occur suddenly or develop gradually over years. The cost of a manual handling injury is enormous in human, financial, and social terms to the employee, the employer, and the community.

The Health and Safety in Employment Act 1992 requires employers to identify hazards, and control the hazard according to the hierarchy of elimination, isolation, and minimisation.

Manual handling is a hazard when it involves:

- A repetitive or sustained application of force, movement or awkward posture;
- An application of high force;
- Exposure to sustained vibration;
- Handling of live persons or animals; or
- Handling of unstable or unbalanced loads, or loads that are difficult to grasp or hold.

An ergonomic assessment may also be of use when assessing which work activities may be hazardous, and therefore may cause injury. An ergonomic assessment involves a trained professional analysing the worker, their environment and their work, and assessing the relationship between all three components to assess risk.

When a hazard is identified in a workplace, the employer is required to manage this hazard. The first step for controlling hazards is elimination. Elimination of manual handling hazards can be achieved by:

- Providing lifting devices;
- Process automation;
- Equipment adjustment;
- Delivery of stock or product close to or at the site of final location; and
- Appropriate ordering of stock so that the stock can be carried correctly and safely.

In some work environments elimination may not be either practicable or possible.

Isolation is the next step in the control hierarchy. In many cases the isolation of the manual handling risk from the worker may not be practicable, as manual handling may be an integral part of their work. However, in situations where an employee who is at increased risk from a manual handling injury, e.g. a worker who is older, or one who is at increased risk from musculoskeletal injury, and where the manual handling aspect of the employee's job can be carried out by someone else, then the employee could be rotated through jobs to avoid the manual handling hazards.

Minimisation is the final control method in the hierarchy. Minimisation should only be utilised in

conjunction with other control methods or where other control methods are not considered practicable.

Examples of minimisation that employers can implement include:

- Encouraging early reporting;
- Rotation between a variety of tasks using different muscle groups;
- Working with employees to assess the risk and develop solutions;
- Monitoring employees' exposure to the hazard.
- Monitoring of the environment to ensure appropriate conditions for safe work, e.g. lighting, temperature, etc.;
- Monitoring the effect on the employee via a simple check sheet or questioning;
- Recording of injuries in an incident register;
- Evaluation of the register regularly to assess for recurrent hazards;
- Provision of education and training on how to prevent injury e.g. exercise, stretches, micropauses, breaks;

- Ensuring staff levels are adequate;
- Ensuring that workers who are seated have adjustable seats, or seats at the correct height;
- When sitting, workers should have back support and sufficient leg room; and,
- Reducing muscle and back strain on standing workers by using footrests to change positions, and placing mats and floor coverings on hard floor surfaces.

Examples of minimisation that employees can implement include:

- Trying not to do all lifting and moving in a short period; instead do it over the day.
- Varying the type of work being done so different muscles are being used.
- Sharing out manual handling tasks among several workers rather than only one worker.
- If the work is strenuous, use short rest breaks to give muscles time to recover.
- Working with your employer to offer and implement solutions.