



Shift materials safely using manual handling methods

TLID1001A

By the end of this topic, you should be able to:

- Assess risks associated with relocating loads
- Plan load relocation
- Relocate load

What is manual handling?

- The term 'manual handling' refers to the use of force to complete a task
- It describes a range of activities regarding objects, animals or people, including:
 - Carrying
 - Lifting
 - Lowering
 - Moving
 - Pulling
 - Pushing
 - Holding or restraining

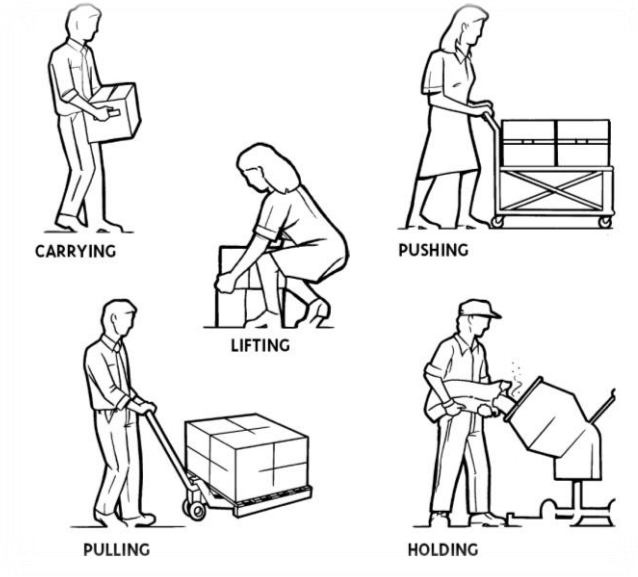


Image source: <http://admireworkplacesafety.com.au/wp-content/uploads/2015/10/manualhandling.jpg>

Issues with manual handling

- Manual handling tasks put additional load on the spine
- Your spine runs from the top of your neck down your lower back
 - It is made up of many bones called vertebrae, one below another
 - Between the vertebrae are joints and discs
 - These give your back flexibility so it can move
 - Discs are flexible because they have a substance like jelly inside and act as shock absorbers for the spine

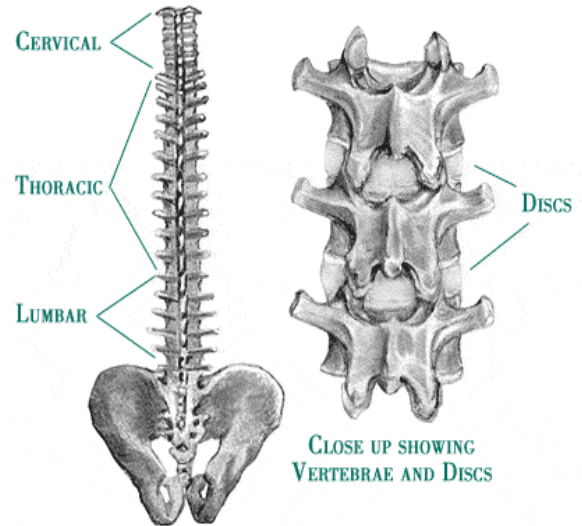


Image source: http://stevemasonsmog.typepad.com/photos/uncategorized/2008/05/04/spine_2.gif

- Spinal injuries can be caused by:
 - Heavy loads or strong forces
 - Work involving too much bending, reaching, rotation or twisting
 - Repetitive work over long periods of time (e.g. holding the same posture/position)
 - Sudden uncontrolled movements (e.g. lifting when not prepared for the load weight)
 - Stretching the body by carrying or lifting when the load is too far from the body

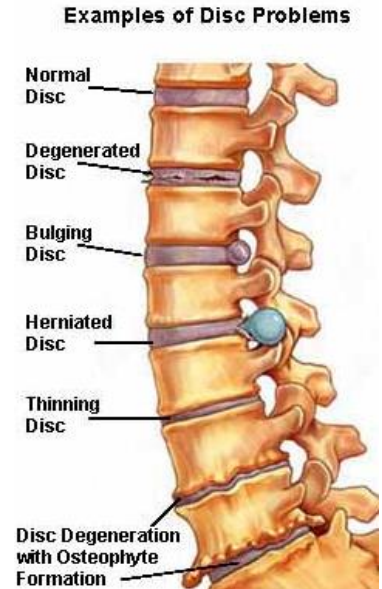


Image source: <http://ocwellnessphysicians.com/wp-content/uploads/2015/03/back-pain-chiropractor-huntingtonbeach01.jpg>

- One in three injuries to Australian workers are caused by manual handling
 - Injuries may include sprains, strains, soft tissue injuries, hernia, spinal disc injuries, damage to muscles, ligaments, tendons, nerves, joints and bones
 - Most reported manual handling incidents relate to back injury – however, the neck, hands, arms, elbows, knees, legs, ankles and feet are also vulnerable
 - Injuries result in time off work and significant costs in terms of medical treatment and lost productivity
 - Manual handling injuries account for the highest costs of all workers compensation claims in Australia

Injuries may require a long period of rehabilitation (or may not be recovered from), so it is important to ensure that manual handling tasks are correctly carried out

- A person conducting a business or undertaking (PCBU) is legally required to provide a safe workplace under the *Work Health and Safety Act 2011* (Qld) and *Work Health and Safety Regulation 2011* (Qld) – this includes:
 - Identifying and assessing the risk of manual handling injuries
 - Putting controls in place to prevent/reduce such injuries
- Workers are also required to take reasonable care for their own health and safety – complying with reasonable direction from the PCBU

- Refer to the following documentation for additional guidance to support legal requirements:
 - Code of practice
 - Hazardous Manual Tasks Code of Practice 2011 (Qld)
 - Manual Tasks Involving the Handling of People Code of Practice 2011(Qld)
 - Safety Data Sheets (SDS) for handling hazardous materials and chemicals
 - Workplace procedures
 - For example: Safe Operating Procedures, Safe Work Method Statements

If you have any questions or concerns regarding manual handling tasks, consult a Health and Safety Representative, Leading Hand, Safety Officer or your supervisor

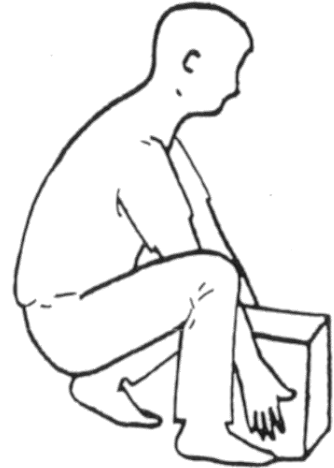
- When planning to relocate a load, be sure to undertake a risk assessment which considers the products/goods/materials to be relocated
 - Identify the sizes and weights of items, calculating size to weight ratio
 - Consider the dangers of moving loose/liquid/hazardous items
 - Refer to SDS, where necessary
 - Consider the position of the load
 - Is the load at height or in a confined space?
 - Predict the effect of the relocation on the original load base
 - For example, the box might break
 - Consider your hand placement and estimate the point of balance
 - Are the items awkwardly shaped, difficult to grasp or slippery?

- When planning to relocate a load, be sure to undertake a risk assessment which considers the end destination and potential routes
 - Measure out distance to be covered, time allowed, and frequency of shifting operations
 - Consider the layout of the work area
 - Long distances or short timeframes may require the use of additional assistance (e.g. mechanical aids)
 - Compare the required clearance to move the load to the available space/layout
 - Items may need to be dismantled if there is insufficient clearance
 - Consider other potential route risks
 - Move obstacles in the way, if easy – otherwise an alternative route may need to be selected
 - Avoid areas that are unstable (e.g. slippery ground) or unsafe (e.g. poor lighting)
 - Determine traffic in the area – avoid busy areas, or schedule lifts at non-peak times
 - Weather may affect any outdoor movements

- When planning to relocate a load, be sure to undertake a risk assessment which considers required controls to reduce risks to self:
 - Personal Protective Equipment (PPE)
 - For example: Gloves
 - Mechanical aids
 - For example: Wheelbarrows, trolleys, hoists, conveyor belts, cranes, forklifts
 - Repacking a heavy load into smaller parcels
 - Making several trips
 - Team lifts
 - Additional training

Manual handling techniques

- When lifting items, be sure to follow appropriate procedures to avoid injury
- Ensure the following:
 - Neck is upright
 - Back has natural curve
 - Feet are flat and facing the load
 - Shoulders are level
 - Knees are bent
 - Hands have a good grip around the load



Avoid rotation and side movement of the spine during lifting

- Other techniques include:
 - Warming up muscles with gentle stretches before manual handling tasks
 - Keeping the load close to the body
 - Maintaining your natural posture throughout – don't overstretch
 - Using a wide, balanced stance
 - Carrying with your entire palm, not just your fingers
 - Using your feet to pivot and turn, rather than twist your body
 - Opting to push a load over pulling it, as it will be less stressful on your body
 - Avoiding jerky movements
 - Taking frequent breaks
 - Cooling down after heavy work with gentle, sustained stretches

- When undertaking team lifts, observe the following tips regarding teamwork:
 - Coordinate tasks sequentially, timely and effectively
 - Use clear language and concepts (verbal and non-verbal)
 - Consider the varying cultural and ethnic backgrounds of your co-workers
 - Consider the message you are communicating and the best method to communicate it (e.g. written, verbal)
 - Consider the abilities of your co-workers
 - Providing breaks to workers can reduce fatigue and prevent injury

- The goal is follow the planned process and route
- Relocated materials should be set down without damage
 - Personnel and equipment associated with the lift should also be unharmed
- Check that the relocation meets work requirements
 - Report any variances and/or damage
- Undertake housekeeping
 - Return any furniture that was temporarily moved
 - Keep the area neat to reduce slips, trips and falls
 - Make any future relocation of items easier