# For any specific tasks there are simple control measures to consider.

#### To prevent injury:

- assess the task before you start
- avoid twisting the back
- hold the load close to the body
- be in a stable position
- use leg muscles
- maintain normal spinal curves, bend at the hip joints and not the back
- position the most frequently used items in easily accessible areas
- ensure adequate space to carry out the task
- adjust the task to meet your needs
- ensure heavier items are not stored too high or low
- do not reach awkwardly for items
- do not sit or stand in the one position for lengthy periods
- do not work in an area that is too low and requires you to bend forward
- use suitable equipment where necessary. If it is unavailable wait until a more appropriate time.

## 4. MONITORING AND REVIEW

Risk management does not end with implementation. Control measures need to be checked to ensure that they are effective and that there are no unforeseen negative outcomes.

Regular monitoring and review of procedures should be undertaken and processes established for staff to report new hazards. A regular program of hazard identification should also be included in the workplace calendar. In addition, any incidents or injuries related to manual handling need to be investigated and corrective actions implemented to minimise the risk of further injury.

#### **REFERENCES**

For further information regarding manual handling refer to:

- OH&S web page on the DET intranet
- detwww.det.nsw.edu.au/adminandmanage/ohands/ind
- BackPak published by WorkCover NSW
- National Occupational Health and Safety Commission
- www.nohsc.gov.au



#### **FURTHER INFORMATION**

- Regional Staff Support Officer, NSW Department of Education and Training Telephone: 131 536
- OH&S Officer at your TAFE institute
- Occupational Health and Safety Directorate Telephone: 9266 8962

# TAKING SAFETY SERIOUSLY



FEB 2004

# MANUAL HANDLING RISK MANAGEMENT PROCESS

The Occupational Health and Safety Regulation 2001 defines manual handling as any activity requiring the use of force exerted by a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any animate or inanimate object.

A documented risk management process is required to ensure that manual handling injuries are prevented. This process should include the following steps.

## I. IDENTIFICATION

Manual handling occurs in all workplaces, whether reaching for a book on a shelf, pushing a student in a wheelchair or carrying resources from one location to another.

Manual handling hazards should be identified by analysing workplace injury records, consulting with employees and through direct observation.

## Typical activities with manual handling risks

There are many areas in schools, colleges and offices that have manual handling risks. Following is a list of areas for consideration when identifying manual handling risks.

#### ■ In the classroom

- moving furniture
- placing students' work on display
- opening and closing windows
- bending to be at eye-level with younger students
- lifting students with special needs
- carrying heavy resources for use in class

### ■ In the library

- pushing a trolley
- carrying books from one place to another
- repetitive bending to gain access to low shelves
- repetitive stretching to gain access to high shelves

#### In administrative areas

- typing continuously
- reaching for resources on high shelves
- bending to gain access to materials on low shelves
- repetitive movements
- maintaining particular postures for prolonged periods

## ■ In the playground

- lifting sports equipment
- gardening and/or general maintenance
- intervening between students in physical altercation

### ■ In storage rooms

- gaining access to materials above shoulder height
- gaining access to materials below thigh level
- manoeuvring around resources and shelving units
- moving difficult to handle items

## ■ Special areas

- moving heavy items/equipment in industrial arts rooms
- moving hazardous items in science laboratories
- utilising unusually shaped items in arts rooms or halls
- assisting students with physical activities in sports areas
- assisting students with physical disabilities



## **Identifying potential hazards**

The following is a guide to identifying activities in a workplace that may pose manual handling hazards.

- Are there activities that require frequent or prolonged bending?
- Are there activities that require frequent or prolonged reaching above shoulder height?
- Are there activities that require an extended bend forward to reach the load?
- Are there activities that require frequent or prolonged twisting of the back?
- Are awkward postures assumed frequently or over prolonged periods to complete some activities?
- Are there activities performed frequently or for long periods of time?
- Do some activities require loads to be moved or carried over long distances?
- Are weights of loads in some activities appropriate for the individual employee concerned?
- Are excessive pushing or pulling forces required to complete some activities?
- Are there loads that are difficult or awkward to handle due to their size, shape, temperature, instability or unpredictability?
- Is it difficult or unsafe to get adequate grip of some loads?
- Are any tasks performed in a confined space?
- Is the environment safe (e.g. lighting, temperature, work and floor surfaces etc)?
- Is the employee new to the work or returning from an extended absence from work?
- Are there age-related factors, disabilities or other special factors that may affect the task performed?
- Does the employee's clothing, hair or personal protective equipment interfere with the task?

This list is not exhaustive but gives an indication of potential hazards that should be considered.

## 2. ASSESSMENT

As soon as manual handling hazards are identified, the next step is to confirm potential causes and to assess the level of risk. A 'yes' response to any of the questions listed indicates that the activity is a risk that should be assessed.

The assessment process must consider the following task characteristics.

Actions and movements	Does the task involve bending forward, sideways or twisting, sudden or jerky movements or uneven loads?
Workplace layout	Is the task carried out in a difficult position or cramped work space? Is there a need to reach above shoulder height or below mid-thigh? Is there a need to reach for objects held away from the body?
Postures and positions	Does the task require the person to stay in one position for long periods of time, or continually repeat particular positions frequently throughout the day?
Duration and frequency	Is the task carried out for long periods or at high speed?
Load location and distance	Does the load need to be moved over long distances or past obstacles? Does the load need to be placed in an awkward location?
Work organisation	Are work schedules, work procedures, rest breaks and recovery time adequate? Is there task variety? Is relevant equipment available?

(Task characteristics continue on page 3)

Work environment	Does the climate affect the task? Are lighting, workspace and floor surface suitable? Is housekeeping or footwear a consideration?
Weights and forces	Is the lifting or moving of heavy weights required? Is force required? Are weights handled while seated?
Types of loads	Are loads difficult to hold? Do they block workers' vision? Are loads live or unpredictable? Are loads hazardous? Do loads need to be held away from the body?
Personal factors	Does the person have the skills and experience to carry out the task? Will the person's age, clothing or special needs affect their ability to do the task?

Following the assessment process, risks should be recorded in priority order. This will determine which of the manual handling tasks require urgent attention.

## 3. CONTROL

Having identified the hazards and placed them in priority order, action needs to be taken to eliminate or control the risks.

Elimination and control measures need to be developed in consultation with staff. They should be documented and communicated to all relevant people in the workplace to ensure that procedures are known, understood and implemented correctly.

If it is not reasonably practicable to eliminate risks arising from a manual handling activity, then control measures need to be applied to reduce the risk to the lowest level possible.

Controls may include one or more of the following processes.



Job redesign	<ul> <li>Modify the object</li> <li>Modify the workplace layout</li> <li>Alter the actions, movements, forces</li> <li>Rearrange materials</li> <li>Modify the task, e.g. mechanical assistance, team lifting</li> </ul>
Use of mechanical aides	<ul> <li>Trolleys</li> <li>Hoists</li> <li>Forklifts</li> <li>Height adjustable tables/workstations</li> </ul>
Training	<ul><li>Generic manual handling and lifting techniques</li><li>Job specific training</li></ul>
Other administrative controls	<ul> <li>Written procedures for specific tasks</li> <li>Written guidelines for safe practice (e.g. appropriate clothing, PPE, hair fasteners)</li> <li>Supervision as required</li> </ul>