Physical support manual handling workbook
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Training and assessment information

Welcome
Welcome to your course and Premium Health. The aim of this resource is to provide the basic knowledge and skills you require to recognise the manual handling tasks performed in your workplace, the ways in which these tasks may lead to injuries and safe work practices required to minimise the risk of these injuries occurring.

Helping you to succeed in your course
We believe learning should be an enjoyable and challenging process and we understand that each learner is different. A variety of methods such as class participation, group discussion, scenarios, workbook exercises and opportunities for practice will help you to achieve competency.

We select our Premium Health trainers and assessors carefully. All are nurses or paramedics with appropriate qualifications, technical expertise and experience in both education and emergency first aid and in the disability or health care sector. This enables them to provide you with quality training which is grounded in experience and knowledge of the field.

Performance outcomes
On completion of this course you will be able to:
- Define the term Manual handling
- Identify manual handling tasks within the work environment
- Identify how to minimise manual handling injuries to yourself and others
- Identify the principles of safe lifting and moving of loads
- List the relevant health and safety legislative requirements
- Demonstrate safe and effective techniques used in resident handling.

Statement of Participation
A Statement of Participation will be issued upon successful achievement of the assessment tasks in this non-accredited course.

Evaluation of the course
A student feedback form is provided at the back of the workbook. Your feedback is important to us as we use this as part of our continuous improvement cycle. Please complete the form at the end of your course.

Premium Health’s customer service
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Manual handling

Manual handling means using your body to exert force to handle, support or restrain an object, including people or animals. It is not just lifting or carrying heavy objects; it includes: lifting, pushing, pulling, holding, lowering, throwing, carrying, packing, typing, assembling, cleaning, sorting and using tools.

The term is not limited to handling heavy objects – pruning plants, stacking items onto a shelf, helping a person into a bath and even using a keyboard are all examples of manual handling.

Hazardous manual handling involves:

- **Repetitive or sustained** application of force, awkward postures or movements
- Tasks that people would find difficult due to the **degree of force** applied (high force)
- Exposure to **sustained vibration**
- Manual handling of **live people or animals**
- Manual handling of **unstable loads** that are difficult to grasp or hold.

The Manual Handling Regulations define manual handling as **being any activity requiring the use of force exerted by a person to lift, push, pull, carry or otherwise move, hold or restrain any object. This can incorporate “material” manual handling and the manual handling of “people”**. What work tasks do you perform that fits this definition?

Why is safe manual handling so important?

As most jobs involve some form of manual handling, most workers are at risk of a manual handling injury. Injuries in Health, Aged Care, Rehabilitation, and Disability services remain a major Work Health and Safety issue due to the necessity to physically handle people.

WorkSafe Victoria statistics indicate that in 2011/2012 41% of all workplace injury claims were caused by manual handling (Source: WorkSafe Victoria statistical summary 2011-2012). The most common of these injuries are strains and sprains. These injuries can occur when muscles and other soft tissue are overexerted or subjected to forces beyond their capabilities. Within the Disability Services sector, 45% of injuries involve the neck, back and shoulder. While those working in health and aged care services, 53% of injuries involve the neck, back and shoulder. (Source: http://www.worksafe.vic.gov.au/worksafe/hotspots/disability_hotspot.html).

Statistics indicate that almost all professionals that are involved in resident handling will at sometime during their career develop a soft tissue injury, and it is when continued injury occurs to this soft tissue, that permanent and sometimes irreversible damage occurs.

What is the impact of a manual handling injury?

Injury that results from manual handling can have a significant impact on both employers and their workers. For an individual, an injury may not only lead to pain and the potential for ongoing disability, but may also cause loss of income and may directly impact on the person’s future working options. In addition, there is also the impact that injury has on the person’s life outside of work, including personal relationships.

Legislative framework

Victoria’s legal framework for workplace health and safety is the Occupational Health and Safety Act 2004. The OHS Act requires employers to provide their workers with a working environment that is safe and without risk to health. A workplace includes any place where employees or self-employed people work. For workers in disability accommodations services their workplace includes the resident’s home. The duty (legal obligation) of the employer extends to conditions in a resident’s home, in so far as the employer has control over those conditions. Employers are also required to provide employees with safe and healthy systems of work and sufficient information, instruction, training and supervision to enable them to perform their work safely.

Under the OHS Act employees also have specific obligations, including:

- To take reasonable care for their own health and safety
- To take reasonable care for the health and safety of others that could be affected by their actions or omissions
• To co-operate with their employer, and OHS policy and procedures
(Source: *Occupational Health and Safety Act, 2004*)

As community care workers who work on their own without direct supervision, employers rely to a large degree on:
• the skills and experience of the workers; and
• that workers follow the designated safe working procedures at all times.

The **Victorian OHS Regulations** specify obligations for employers and employees whose work involves *any activity requiring the use of force exerted by a person to lift, push, pull, carry or otherwise move, hold or restrain any object which also includes any person*.

The Code of Practice for Manual Handling 2000 provides practical guidance on how to achieve the requirements specified by the Regulations. The provisions of the Code are not mandatory – rather, they are guidelines for best practice.
The OHS framework for manual handling includes the following:

<table>
<thead>
<tr>
<th>Occupational Health &amp; Safety Act 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requires employers to provide a safe working environment, safe systems of work and instruction &amp; training</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupational Health and Safety Regulations 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies obligations for employers in relation to manual handling tasks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code of Practice for Manual Handling 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides guidance on how to comply with the legislation</td>
</tr>
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</table>

**Risk management**

It is recommended for an employer to take three steps in dealing with manual handling tasks performed at their workplace:

1. Identify tasks involving hazardous manual handling
2. Undertake a risk assessment to work out what has the potential to cause harm
3. Control risks to ensure that any likelihood of an employee suffering a musculoskeletal disorder is either eliminated or reduced as far as is reasonably practicable.

The department requires the completion of the Physical Support Assessment (PSA) to identify, assess and control the risks related to physical support of residents. PSAs are completed for each resident and stored within their individual health folder. (As per the Residential Services Practice section 3.3 – Manual Handling)

1. **Identify the risks**

   This refers to the potential risks to employees, visitors or others within a workplace. Risk identification is accomplished by completing the PSA which looks at the majority of the tasks that are completed by any one person within a workplace as part of their normal day to day activities for the role that they are employed to do. We should also look at the risks which could involve visitors and others who are not employees of the workplace i.e. residents, children etc. Risky tasks can also be identified by reviewing Incident Report documents, DINMAS, discussions at staff meetings and via workplace inspections.

2. **Risk assessment**

   Risk assessment needs to take into account whether the activity involves:
   - Repetitive or sustained application of force
   - Repetitive or sustained awkward posture
   - Repetitive or sustained movement
   - Application of high force
   - Exposure to sustained vibration
   - Manual handling of live people or animals
   - Manual handling of loads that are unstable, unbalanced or difficult to hold.

   In addition, risk assessment includes evaluation of environmental conditions that could impact on safety, such as heat, cold, clutter, poor lighting, etc. The risk assessment examines whether there is a likelihood of a musculoskeletal disorder (any injury to muscles or skeleton such as sprains, strains, bruising, broken bones, hernias) affecting an employee as a result of performing that task. In the PSA this is called the Common Areas Assessment.
From a worker’s perspective, if you notice a task or problem in your area which presents as a risk to your health and safety, you need to contact the Supervisor to find out if this risk has been identified previously and if there is a control for it. If there is not a control you can assist in finding one by completing a risk assessment to determine the risk and the likelihood of the task causing an injury. Another way you can assist is to fill out incident reports including ‘near misses’ (these are incidents that could have led to an injury) and ‘actual injuries’. This helps with the future control of these risks. Filling in DINMAS and talking to Health and Safety Representatives can help eliminate risks in the future.

3. Controlling risks

Risk control or minimisation requires the use of the Physical Support Assessment (PSA). They contain information on how to support the resident safely and what specific equipment is required. If the resident’s needs change, and the current procedures or equipment are no longer effective the PSA needs to be reviewed.

Hierarchy of controls

<table>
<thead>
<tr>
<th>Risk control action</th>
<th>Description</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliminate the hazard</td>
<td>No longer carry out the task</td>
<td>Not shower resident</td>
<td>Not clean the shower</td>
</tr>
<tr>
<td><strong>If this is not practical then</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substitute for a lesser risk</td>
<td>Substitute the hazard giving rise to the risk with one that presents a lesser risk</td>
<td>Bed-bathe or sponge the resident</td>
<td>Use a safer/less toxic cleaning product</td>
</tr>
<tr>
<td>Isolate the hazard from the person at risk</td>
<td>Separate the hazard in time or space from the person at risk</td>
<td>Shower the resident in another accessible room until the hazard is resolved</td>
<td>Leave the bathroom to air after applying the shower cleaner</td>
</tr>
<tr>
<td><strong>And/or</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use engineering controls</td>
<td>Physical changes to equipment or the environment e.g. redesign, ventilation</td>
<td>Modify the shower for level access, shower the resident on a shower commode chair, use a hand shower</td>
<td>Install an exhaust fan to increase ventilation when cleaning the shower</td>
</tr>
<tr>
<td><strong>If this is not practical then</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use administrative controls</td>
<td>Changing work methods, organisation of tasks, review work routines, training</td>
<td>Write a procedure on how to shower the resident safely, train workers in the procedure</td>
<td>Provide material safety data sheets, train workers in safe use of chemical</td>
</tr>
<tr>
<td><strong>And/or</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use personal protection</td>
<td>Least effective. Use in combination with other controls</td>
<td>Wear glove, non-slip shoes, apron when showering resident</td>
<td>Wear gloves and a mask to clean shower</td>
</tr>
</tbody>
</table>

Elimination involves removing the risk completely or creating safer ways to complete the task. Where it is not practicable to do this, you must reduce it as far as practicable. **Practicable** means weighing up the following factors:

1. The severity of the hazard or risk in question
2. The state of knowledge about that hazard or risk and any ways of removing or reducing that hazard or risk
3. The availability and suitability of ways to remove or reduce that hazard or risk
4. The cost involved in removing or reducing that hazard or risk

In order to manage risks, some of the working positions we need to avoid are:

- Extended reaches with the arms because of the demands they place on the shoulder joint (our arms make up about 13% of our body weight)
- Moving the upper arm upward
• Movements or actions which bend the wrist up or down or which cause the hand/wrist to move from side to side without moving the forearm
• Lifting while sitting
• Lifting from the floor or from above shoulder height
• Extending your neck by looking up or bending the neck back when lifting from overhead
• Bending the neck forward or backwards
• Walking or forceful contact of the feet and legs over uneven surfaces
• Sustained stooping, leaning backwards or leaning sideways
• Doing unnecessary tasks
• Movement where our shoulders are not kept in alignment with the hips so that we do not twist our spine while doing a manual handling task
• Using manual handling equipment that we have not been instructed to use, as it may put undue force on our bodies.

Practical ways to minimise risks in the work setting include:

• Needing to work with our body and maximise its strengths and minimise its weaknesses. Wherever possible, we want to use our biggest/strongest muscles (like our thighs, biceps and core body strength) and not our more vulnerable ones such as the muscles in our lower arms or lower back or hands
• Needing to create better systems of work i.e.: arranging tasks that require two staff to be completed when there are two staff able to attend to this task
• Making simple changes to the work environment like clearing space to work safely, creating and using appropriate storage for equipment and bringing the work to waist level where possible, rather than a height that is too high or low.
• The use of mechanical aids and other safety equipment that is there to reduce force on our bodies, and only after being trained
• Always remember when lifting a resident, this is a very high risk activity as they are a heavy, unstable and unpredictable load.

Principles of safe lifting and moving loads
It is important to be aware that DHHS safe work practices are designed so staff do not physically lift or support the full body weight of a resident while assisting them with activities of daily living

Stop and think - Plan ahead

• Always ensure that you know what you are going to move and the safest way to do it
• Always follow the established or documented safe ...... procedure to ensure manual handling is done in the safest possible way
• The manual handling procedures should be relevant to you as the worker, to the physical work environment and equipment and to anyone within that environment. Manual handling procedures can be created for each task requiring manual handling and should be created as part of a team consultation. Refer to resident’s PSA (Physical Support Assessment).
• Eliminate or reduce the amount of manual handling tasks wherever possible
• Plan your task and always utilise mechanical aids / lifting equipment when required
• Concentrate on the task and approach each task mindfully

Position feet

• Place your feet apart (roughly hip width) to give a balanced stable base
• Always turn using your feet, not twisting the back

Adopt a safe working posture

• Maintain the 3 natural curves in your back when lifting. Keep your head up and your chin in
• Use a whole hand power grasp (the sort of grip you might use when clasping a broom handle) rather than a pinch grip (the grip you might use to hold a pen). If lifting from a low level, bend your knees, adopting a squatting posture (or if unable to squat, down on one knee)
• Lean forward a little over the load, if necessary to get a good grip
• Don’t twist the trunk when turning to the side. Turn using your feet, keeping the load close to you.
• Vary your work position to reduce extended periods of standing without moving or being in the one position.

**Keep close to the load**
• Keep the load close to your trunk for as long as possible. Holding the load at arm’s length increases the load on the spine
• If the load is unbalanced, keep the heaviest side of the load close to the trunk
• Where possible work at waist level. If not possible, lower your body to waist level eg in a squat position (or if unable to squat, down on one knee) and exert the force as close as possible to your own body.
• To reduce the amount of force exerted on your body when manual handling, push the load rather than lifting.

**Move smoothly**
• Lift in a smooth flowing action
• Use your leg muscles rather than your back muscles to bend down and straighten up
• Push rather than pull objects – this enables you to use your body weight to help
• If you need to place the load precisely, put it down first then adjust its position

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**Be SMART:**

- **S**: IZE UP THE LOAD  
  Know exactly what you are going to move and what you are going to need to move the load safely

- **M**: OVE CLOSE TO THE LOAD  
  Keep your body as solid as possible using your core strength, load close to your trunk and extremities tucked in

- **A**: LWAYS BEND YOUR KNEES  
  Use leg muscles rather than back muscles to move up and down

- **R**: EMEMBER TO BRACE  
  Place feet apart for balance or put leading leg forward for support, brace your core, keep arms braced against body during techniques

- **T**: URN BY MOVING YOUR FEET  
  Don’t twist the trunk when turning to the side, turn using your feet
Postures and actions used in manual handling

Whilst performing manual handling tasks, there are a number of postures and actions that we use in order to make the procedures safer and more efficient. These include:

<table>
<thead>
<tr>
<th>Posture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-squat</td>
<td>Keep feet hip width apart</td>
</tr>
<tr>
<td></td>
<td>Bend knees</td>
</tr>
<tr>
<td></td>
<td>Don’t let knees come forward over toes</td>
</tr>
<tr>
<td></td>
<td>Weight through heels</td>
</tr>
<tr>
<td>Side lunge</td>
<td>Position feet slightly wider than hip width</td>
</tr>
<tr>
<td></td>
<td>Toes turned out at 45°</td>
</tr>
<tr>
<td></td>
<td>Weight starts on one leg and then transfers in a sideways direction to the other leg smoothly</td>
</tr>
<tr>
<td>Lunge</td>
<td>Position feet in stride standing</td>
</tr>
<tr>
<td></td>
<td>Toes pointing forwards</td>
</tr>
<tr>
<td></td>
<td>Weight starts on one leg and then transfers in a forward/backward direction to the other leg smoothly</td>
</tr>
<tr>
<td>Kneeling</td>
<td>Position feet in stride standing</td>
</tr>
<tr>
<td></td>
<td>Lower back knee to the ground to come to a kneeling position</td>
</tr>
<tr>
<td></td>
<td>Keep front foot flat for stability</td>
</tr>
<tr>
<td>Counterbalance</td>
<td>Stand in a semi-squat</td>
</tr>
<tr>
<td></td>
<td>Lean weight backwards through heels, keeping arms braced straight</td>
</tr>
<tr>
<td></td>
<td>Bodyweight acts as a lever on the object or person</td>
</tr>
<tr>
<td>Cross brace</td>
<td>Use arms to create a turning/lever force around the axis of an object or person</td>
</tr>
</tbody>
</table>

Resident manual handling techniques – for residents able to assist

It is important to note that the techniques outlined below are generic. Each resident is likely to require a slight variation/adaptation in techniques used. Trainees should always refer to the resident’s physical support summary at the house.

**Sit to stand**

- Move bottom forward in chair
- Feet apart and pulled back
- Hold arms of chair
- Lean forward and push up to stand
- Technique for:
  - Independent
  - Assist x 1
  - Assist x 2

**Rolling**

- Bend up knee
- Turn head in the direction of the roll
- Reach arm across body
- Push through feet to roll
- Technique for:
  - Independent
  - Assist x 1
Getting off the bed
- Roll to side
- Slide legs off the bed
- Push up to sitting using elbow and hand
- Technique for:
  - Independent
  - Assist x 1
  - Bed mechanics

Getting on the bed
- Sit on side of bed
- Place elbow down on bed
- Lower head down to pillow
- Lift legs up onto bed
- Roll onto back
- Technique for:
  - Independent
  - Assist x 1

Moving up the bed
- Lying on the back
- Both knees bent and feet on bed
- Push through the heels and hands and lift the bottom to move up the bed
- Technique for:
  - Independent
  - Assist x 1

Wheelchairs
- Safety:
  - brakes
  - footplates
- Make sure person is sitting right back in the chair. Look or feel to check that there is no gap between the resident and the backrest. If necessary, re-position after transferring them into their chair.
- Use technique for safely pushing loads
- If transporting wheelchairs:
  - remove footplates
  - remove wheels if able
  - fold chair
- If transporting in a bus make sure DHHS minimum requirements are followed i.e. staff are not to stand on a moving bus hoist
- Ideally hire chair at location, or use a Wheelchair taxi
Car transfers

- Step back towards car seat
- Hold seat and car door and lower bottom down to seat
- Bring legs into the car, one at a time
- Swivel body to face the front
- Reverse to get out of the car

Climbing stairs / on or off bus

- Hold rail if available
- Staff member to stand close and be behind resident when going up stairs and stand in front of resident when going down stairs

Going up stairs and down stairs should be avoided and reviewed if a resident is unstable when stepping up/down the bus. Resident may need to be transferred more safely i.e. via bus hoist – seated in a wheelchair, then transferred out of the wheelchair into bus seat.

- Going up stairs:
  - resident to place the good foot on the step, then raise the bad foot and stick to that step
  - repeat for all steps
- Going down stairs:
  - resident to lower bad foot and stick to step and follow with the good foot
  - repeat for all steps

Staff climbing on/off bus

- Important staff do not rush when climbing into the driver/passenger seat
- Always step onto the running board first, or if the model doesn’t allow this, they should have 3 points of contact:
  - Place right foot on the running board, right hand on the steering wheel or grab rail if fitted and left hand on the seat
  - Step up into the vehicle with the left foot
  - 3 points of contact should be maintained at all times to prevent falls
  - When exiting perform steps in reverse order
Attaching wheelchair restraints

- It is important that this task is well planned and not rushed. Refer to loading sequence and seating plan at the house to maximise space available to move in the bus
- Never bend at the waist
- Lower into the squat position
  - Knees shoulder width apart
  - Buttocks lowered towards the floor
- Weight should be maintained on heels and knees should never come forward of the toes
- If space allows staff may also lower safely to one knee or sit on bus seat to reduce bending

This technique must only be done with detailed guidelines provided by the therapist. Slide board with slide sheets are not commonly used combination for disability accommodation services. Residents must have good cognition and upper body balance and upper limb strength to manage this safely.

- Resident sitting over side of bed
- Wheelchair positioned next to bed with armrest removed
- Use slide board +/- Slide sheet
- Place slide board under resident’s bottom and across the chair
- Patient holds the far armrest of the wheelchair and lifts/slides their bottom across
- Technique for:
  - Assist x1

Bed to chair
Resident manual handling techniques with mechanical aids – for residents requiring assistance

Resident that has fallen
For a resident that is not injured and is independent:
- Provide a chair or other sturdy object for balance
- Resident to get onto all fours
- Move into a kneeling position whilst holding the chair
- Using chair, push up to standing
- Sit down on the chair

If resident injured or requires more assistance, transfer from floor using a hoist or Lifting Cushion and follow the policies and procedures for your organisation
- Staff must not pull or lift resident at through any stages of the transfer off the floor
- Place residents legs across the base of the hoist (see picture)

Standing hoist
- It is best practice to always use a hoist with 2 trained staff members
  - If only one person is rostered on in the house, please refer to PSA
- Used for a person that cannot weight bear well enough to turn
- Safety – balance, grip, foot placement, cognition
- Technique to be demonstrated
- If no hoist is available:
  - Resident is injured: call triple 000
  - If no injury: make the resident comfortable and warm, call operational manager, after hours on call or another nearby house for assistance.

Rolling with assistance
- It is best practice to always roll a resident with 2 trained staff members
  - If only one person is rostered on in the house, please refer to PSA

1st staff member:
- Prepare resident for roll
- Place their hands at shoulder and hip
- Communicate with other staff
member so there is synchronised movement

2nd staff member:
- To assist roll of resident towards 1st staff member
- Place hands at shoulder and hip level
- Stand in semi-squat
- Assist roll by powering up using legs
- Technique to be demonstrated

Hoist
- It is best practice to always use a hoist with 2 trained staff members
  - If only one person is rostered on in the house, please refer to PSA
- Used for a person that cannot weight bear to assist with transfer
- Can be mobile or ceiling hoist
- Safety – SWL, sling
- Technique to be demonstrated

Slide sheets
- It is best practice to always use a slide sheet with 2 trained staff members
  - If only one person is rostered on in the house, please refer to PSA
- Used for a person that requires assistance to reposition in bed
- Can be used to move fallen resident in a tight space
- Made from slippery material
- Reduces friction and effort
required

- Only to be used by trained staff
- Techniques to be demonstrated
  - Moving across bed to assist with dressing
  - Down bed
  - Up bed

**Conclusion**

Manual handling is a major cause of injury in all workplaces, but especially for those who work in Community Services. Poor working postures and repetitive movements are major factors in contributing to injuries. We need to work with our bodies and their limitations to avoid unsafe work practices and postures. If you don’t feel safe performing a task, then stop, ask for help, and speak to your supervisor. If you can see a better/safer way of doing a task, be proactive and share this at your team meetings or advise your supervisor or Health Safety Representative (HSR). If you have any concerns about performing physical support manual handling tasks refer to the PSA, Occupational Therapist, or Health Safety and Wellbeing resources.
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Safe Work Australia
An independent statutory agency responsible for improving occupational health and safety and workers’ compensation arrangements across Australia.


National Compliance and Enforcement Policy

WorkSafe Victoria

HACC in Victoria


Appendices
Please note the following resources are supporting material only. Please always refer to the RSPM and PSA as a primary source of information.
Appendix 1: Moving and supporting people with a disability

A Health and Safety Solution

Moving and supporting people with a disability

What is the problem?
The task of moving and supporting people with a disability has been associated with musculoskeletal injuries within the disability services industry.

What are the risks?
Workers may be at risk of injuries from strains to the back, neck and shoulders when bending, twisting, lifting, pushing, pulling and exerting high or unexpected forces.
The common sources of risk include:

Task
• Exerting high forces to lift, transfer or move people where no equipment or aids are available.
• Moving unexpectedly or with abrupt forceful motions such as when preventing people from falling.
• Working in an awkward position for sustained periods (eg assisting with meals or dressing/dressing).
• Managing unpredictable client movements or behaviours such as seizures, expressions of strong emotion or self-harm.

Equipment
• Unsuitable equipment or aids.
• Faulty equipment or aids.
• No equipment or aids.

Environment
• Insufficient space for workers to use equipment.
• Equipment or aids stored in inaccessible locations.
• Inappropriate working heights.
• Thick carpets or soft underlay on floor.
• Different floor levels.
• Uneven surfaces.

These issues should be considered during the initial assessment of the person's needs and if they pose a risk, must be controlled prior to the provision of service.

What are solutions to the problem?
The risk of injury to workers can be eliminated or reduced by the following safety measures:

Equipment/aid provision and use
• When supporting a person who requires minimal physical support, equipment to reduce the risk of injury to workers may include:
  • hand/grab rails
  • electric stand chair
  • modified/specific chair
  • leg lifter
  • bed stick
  • dining chair with lockable wheels
  • walking aids such as a frame or stick.
• When supporting a person who is able to partially assist, additional equipment to reduce the risk of injury to workers may include:
  • electric hi-lo bed
  • standing hoist to lift person into a supported standing position, to transfer from one location to another, or when assistance is required
  • mobile sling hoist to lift and transfer people short distances
  • slide sheet
  • slide board
  • hi-lo change table
  • height-adjustable ergonomic chair for workers
  • sock/stocking applicator
• When a person requires full support, additional equipment to reduce the risk of injury to workers may include:
  • overhead tracking hoist to move person from the floor, chair or bed
  • wheelchair with electric motor.
• Ensure transfer equipment and aids are:
  • suitable for the task
  • easy to use and manoeuvre
  • maintained in good working order.
A Health and Safety Solution

Environment
- Reduce clutter.
- Provide adequate working space.
- Use furniture and equipment that is light, compact and easy to move where necessary.
- Assess floor surfaces for suitability for moving any wheeled equipment and make appropriate modifications if required (vinyl or low pile carpet).
- Store equipment in a convenient location.
- Adjust transfer surfaces to support movement at approximately the same level (e.g. from bed to wheelchair).

Task
- Allocate two workers for transfers for a person who requires full or partial assistance.
- Develop and implement a system so the transfer of a person will not proceed until a second worker is available.
- Develop and implement a system to regularly seek information from the worker to check if the work environment, tasks or person's needs have changed or need to change.
- Regularly review the person's mobility and behavioural requirements with worker and person to identify potential changes to client care, update relevant documentation and occupational health and safety controls.
- If changes have been made or need to be made, employers should complete a re-assessment of the worker's tasks and environment. Fix any safety issues as soon as possible so the worker's and person's needs are safely met.
- Train workers in using equipment, aids and specific task or work instructions. Update the training regularly.

Further Information

WorkSafe Advisory Service
Toll-free 1800 136 089
Email info@worksafe.vic.gov.au
worksafe.vic.gov.au

Related WorkSafe Health and Safety Solutions
- Supporting people with personal hygiene care
- Assisting people in wheelchairs
- Handling wheelchairs in and out of vehicles
- Occupational violence
- Moving/lifting objects
- Vacuuming
- Mopping
- Cleaning bathrooms
- Making beds
- Work related driving: Transporting people and moving equipment

Related WorkSafe publications
- Manual Handling Code of Practice, 2000
- Transferring people safely

Other related publications
- Victorian home care industry occupational health and safety guide, 2005
- Department of Human Services, Accommodation standards and design guidelines – Shared supported accommodation, 2004

Available from
worksafe.vic.gov.au and health.vic.gov.au
Appendix 2: Supporting people with personal hygiene care

A Health and Safety Solution

Supporting people with personal hygiene care

What is the problem?
Providing support with personal hygiene tasks, such as showering or toileting, to people with a disability has been associated with musculoskeletal injuries in the disability services industry.

What are the risks?
Workers may be at risk of injuries from strains to the back, neck and shoulders when bending, reaching, twisting and exerting high or unexpected forces. The common sources of risks include:

Task
• A mismatch between the assistance required by the person and the documentation identifying their physical support needs.
• Aids and equipment not being provided and/or used when assessed as necessary.
• Unexpected and unplanned movement by the person.

Environment
• Inadequate space to shower/bath/toilet the person.
• Wet or slippery floors.

Equipment
• Unsuitable equipment or aids.
• Faulty equipment or aids.
• No equipment or aids.

These issues should be considered during the initial assessment of the client’s needs and any risks identified should be controlled prior to provision of service.

What are solutions to the problem?
The risk of injury to workers can be eliminated or reduced by the following safety measures:

Systems
• Identify hazards and address the risks associated with bathing, toileting or showering the person with a disability, taking into account the level of support the person requires.
• Conduct an individualised assessment regarding the physical support needs of the client, including equipment and aids required.
• Identify and implement risk control measures and integrate occupational health and safety (OHS) controls into the client’s support plan (This information can also be recorded in a separate OHS plan).
• Provide workers with information, instruction and training on the client’s physical support needs, including OHS controls.
• Encourage the person with a disability to actively participate and/or contribute to physical support tasks where possible.
• Implement systems to:
  • regularly seek information from the worker to check if their work environment, tasks or client’s needs have changed, or need to change
  • re-assess the tasks and environment
  • update and document the client’s physical support plan
  • monitor the implementation and use of OHS controls so the worker’s and client’s needs are safely met.
  • provide a system so workers can report any changes or safety issues to their employer
  • provide workers with training in specific tasks or work instructions.

Equipment/aid provision and use
• Equipment or aids to support a person with a disability and undertake personal hygiene tasks are:
  • assessed as suitable for the task
  • appropriate for the space (eg hoists or shower chair)
  • available, easy to access from storage, set up and use
  • installed or supplied prior to service commencing
  • maintained in good working order
  • assessed as appropriate for the needs of the person with a disability and safe for use by the worker.
A Health and Safety Solution

To reduce the risk of injury to workers provide appropriate equipment for the person who requires assistance including:
- a shower chair/commode
- care assisted bench
- hand/grab rails
- hi-lo bath
- hi-lo change table
- hi-lo hygiene chair
- over toilet seat
- standing aid
- shower trolley.
- Provide workers with training in use of equipment and aids.

Floor surfaces
- Provide stable slip proof mats on the bathroom floor.
- Provide suitable floor surfaces for moving wheeled equipment if required (no bath mats or steps).
- Provide enclosed, non-slip soled shoes, coveralls or gumboots for workers.

Bathroom layout
- Assess available space and layout in relation to the required tasks.
- Develop and implement operational procedures to carry out tasks safely within the available space.
- If the bathroom is not suitable for the tasks, assess the bathroom for potential redesign opportunities such as removing the bath and fitting a walk-in shower with door or lip that does not impede use of aids.

The problem

Learning across bath to assist a person with a disability means the worker is in a bent position and overreaching.

A solution

Using a shower chair in a large shower space minimises reaching and lifting.

Further Information

WorkSafe Advisory Service
Toll-free 1800 136 089
Email info@worksafe.vic.gov.au
worksafe.vic.gov.au

Related WorkSafe Health and Safety Solutions
- Moving and supporting people with a disability
- Assisting people in wheelchairs
- Handling wheelchairs in and out of vehicles
- Occupational violence
- Moving/lifting objects
- Vacuuming
- Mopping
- Cleaning bathrooms
- Making beds
- Work related driving: Transporting people and moving equipment

Related WorkSafe publications
- Manual Handling Code of Practice, 2000
- A guide to designing work places for safer handling of people
- Transferring people safely

Other related publications
- Department of Human Services, Accommodation standards and design guidelines – Shared supported accommodation, 2004
- Victorian home care industry occupational health and safety guide
- Available from worksafe.vic.gov.au and health.vic.gov.au
Appendix 3: Assisting people in wheelchairs

A Health and Safety Solution

Assisting people in wheelchairs

What is the problem?
The task of assisting people in wheelchairs has been associated with musculoskeletal injuries within the disability services industry.

What are the risks?
Workers may be at risk of injuries to the back, neck, shoulders and wrists when assisting people in wheelchairs, particularly from pushing, pulling, bending and exerting high forces. The common sources of risk include:

Equipment
- Wheelchairs that are not maintained or poorly maintained (e.g., flat tyres, brakes not working, loose wheels, castors and damaged upholstery/frame).
- Wheelchairs that are not suitable for the client and/or environment.
- Repairs and modifications conducted by unauthorised or unqualified people.
- Failure to charge electric batteries.

Task
- Effort involved in pushing the combined weight of the wheelchair and client.
- Pushing wheelchairs long distances.
- Transferring people in/out of wheelchairs.
- Pushing an electric wheelchair in free wheel mode.
- Driving electric wheelchairs when using attendant controls.

Environment
- Soft floor surfaces such as deep pile carpets, rugs, lino with soft underlay.
- Inadequate space to manoeuvre wheelchairs.
- Pushing wheelchairs over steep or uneven surfaces (e.g., grass, gravel, curbs, ramps).
- Controlling wheelchairs up and down ramps.
- Inadequate information about wheelchair accessibility.

What are solutions to the problem?
Implement a system to inspect and review the workplace and equipment, and identify any changes in the individual's needs.
If changes have been made or need to be made, employers should complete a re-assessment of the worker's tasks and environment.
Fix any safety issues as soon as possible so the worker's and client's needs are safely met.
The risk of injury can be eliminated or reduced by the following safety measures:

Equipment
- Involve workers in assessment and selection of a wheelchair in relation to:
  - the client's needs
  - worker safety
  - environment where wheelchair will be used
  - ease of operation for client and workers
  - need for attendant controls on electric wheelchairs.
- Regularly maintain and inspect wheelchairs (e.g., checks on tyre pressure, brakes, controls, tyre wear, fabric/structure, charging point and battery condition). If the wheelchair is client owned, include this requirement in the service agreement.

Task
- Develop procedures to identify the safest movement of the wheelchair and client.
- Provide workers with training in the use of wheelchairs including:
  - going up and down curbs, controlling on slopes, managing small lips of ramps, turning
  - practical supervised training exercises at a range of community locations (cafes, train stations, cinema)
- Information provided by manufacturer and/or supplier if available.
A Health and Safety Solution

Environment
- Assess floor surfaces for minimal friction to assist ease of movement. Where necessary, modify existing flooring.
- Provide adequate space to manoeuvre (e.g., appropriate door widths).
- Develop and implement a system so if changes are made to the home or environment, the organisation providing the support is notified (e.g., installation or removal of a portable ramp, home renovation).
- Conduct a pre-visit assessment of accessibility before engaging in community-based activities.
- Avoid sand, loose stones or dirt paths when using indoor wheelchairs.

Further Information

WorkSafe Advisory Service
Toll-free 1800 136 089
Email info@worksafe.vic.gov.au
worksafe.vic.gov.au

Related WorkSafe Health and Safety Solutions
- Moving and supporting people with a disability
- Supporting people with personal hygiene care
- Handling wheelchairs in and out of vehicles
- Occupational violence
- Moving/lifting objects
- Vacuuming
- Mopping
- Cleaning bathrooms
- Making beds
- Work related driving: Transporting people and moving equipment

Related publications
- Department of Human Services, Accommodation standards and design guidelines – Shared supported accommodation, 2004
- Victorian home care industry occupational health and safety guide, 2005
Available from worksafe.vic.gov.au and health.vic.gov.au

Australian Standards
- AS/NZS 2640:1994, Portable ramps for vehicles
- AS3693 – Wheelchairs—Nomenclature, terms and definitions
- AS3695 – Wheelchairs—Product requirements
- AS3696 – Wheelchairs

The problem
Pushing wheelchairs over steep, uneven or soft surfaces can put the worker at risk of injury to the back, neck and shoulders.

A solution
Outdoors, avoid sand, loose dirt, dirt paths when using indoor wheelchairs. Indoors, avoid thick pile carpet and rugs and line with soft underlay.
Appendix 4: Handling wheelchairs in and out of vehicles

A Health and Safety Solution

Handling wheelchairs in and out of vehicles

What is the problem?
Moving wheelchairs in and out of vehicles has been associated with musculoskeletal injuries to workers.

What are the risks?
Workers may be at risk of injuries to the back and shoulders when moving wheelchairs in and out of vehicles, particularly when lifting, reaching, pushing, pulling, bending and exerting high forces in awkward postures.
The common sources of risk include:

Wheelchairs
• Size and weight
• Awkward shape
• Rigid or collapsible type
• Inflatable or rigid tyres

Task
• Moving or lifting a wheelchair
• Disassembling a wheelchair into component parts to assist with transportation

Vehicles
• Lack of appropriate transport, space or attachment points, specifically:
  Vans/buses/taxis
  • Positioning wheelchairs in the vehicle
  • Attaching a wheelchair to points inside vehicle (eg in floor tracking, A frames or mini A frames)
  • Inadequate space to manoeuvre (eg when attaching front wheels to security straps).

Cars
• Lack of equipment to lift wheelchair in and out of car
• Positioning a wheelchair in the boot
• Type of car/boot access
• Lifting a wheelchair up high to avoid damaging car panels.

These issues should be considered during the initial assessment of the client’s need and if they pose a risk to workers, should be controlled prior to the provision of service.

What are solutions to the problem?
Implement a system to regularly seek information from the worker to check if the work environment, tasks, equipment or client’s needs have changed, or need to change.
If changes have been made or need to be made, employers should complete a re-assessment of the worker’s tasks, equipment and environment.
Fix any safety issues as soon as possible so the worker’s and client’s needs are safely met.
The risk of injury can be eliminated or reduced by the following safety measures:

Equipment
• Provide the lightest wheelchair that is suitable and safe for the client and activity.
• Provide manual wheelchairs that are collapsible with quick release wheels.
• Never lift electric wheelchairs or motorised vehicles such as a scooter. These should only be moved in a wheelchair accessible taxi or bus fitted with a hoist or a specially adapted vehicle.

Health and Safety Solution continued overleaf}
**Task**

- Develop operational procedures that identify the safest sequence of actions for:
  - disassembling the wheelchair into small parts (e.g., removal of quick release wheels)
  - moving and lifting wheelchairs, including the identification of parts of the wheelchair to be used as leverage/lifting points.
- Develop a pre-trip assessment checklist that includes detailed accessibility questions relating to the specific requirements of clients.
- Complete a venue checklist for all activities.
- Hire manual wheelchairs and scooters at shopping centres to eliminate the need to transport a wheelchair. Contact the shopping centre prior to a visit to check:
  - hiring conditions
  - the condition and suitability of the chair (e.g., tyre pressure and brakes)
  - the environment (e.g., ramps and access to car park).

**Vehicles**

Employers should assess vehicles as suitable for the task and/or provide appropriate transport to reduce risks to the worker and client. Vehicles include:

- the service provider’s specially adapted vehicle (e.g., rear entry accessible vans)
- the client’s specially adapted vehicle
- the service provider’s car
- suitably trained transport providers
- bus fitted with a hoist
- the worker’s own car.

**Vans/buses/taxis**

- Install vehicle attachment points by qualified and accredited professionals to approved safety standards.
- Develop operational procedures that identify the safest sequence of actions for:
  - loading/unloading
  - securing the wheelchair during transit.
- Provide workers with information, instruction and supervision in documented work procedures.
- Obtain approval from the Vehicle Assessment Signatory Scheme (managed by VicRoads) where any modifications have been/will be made to a vehicle.
- Use wheelchair accessible taxis to transport manual and power wheelchairs and scooters. Note: Taxi drivers may provide assistance with boarding and securing the wheelchair or scooter but may not be required to assist.
- Scooter loaders fixed to the floor of the vehicle that use an electric drive to lift and lower the scooter and rotating arm to swing it into the luggage compartment or boot. Some loaders can be used with a range of scooters and power wheelchairs.
A Health and Safety Solution

Cars

• Use aids to reduce risks such as:
  • wheelchair carriers mounted to the tow bar of a vehicle. Other options allow the wheelchair to be rolled onto the carrier with minimal lifting or require the wheelchair to be lifted and hung off hooks
  • electrically operated wheelchair hoists with a winch to raise and store the wheelchair on the back or in the boot of a vehicle
  • wheelchair ramps to allow a wheelchair or scooter to be loaded into a van or station wagon. Ramps can be freestanding or mounted to the tow bar
  • scooter and wheelchair trailers allow transport without the need to disassemble the equipment. Scooter trailers have a tilting deck to enable a scooter or power wheelchair to be driven on and off the trailer

• If none of the above is practicable, general guidelines should apply for foldable manual wheelchairs. These include:
  • using a wagon or hatch vehicle where the folded wheelchair can be slid straight into the boot
  • removing other items in the boot to provide maximum space for a wheelchair
  • using suitable equipment such as a wheelchair boot slider or slide sheet to lift foldable wheelchairs in and out of a sedan boot
  • holding wheelchairs as close to the body as possible when moving wheelchairs to minimise load when lifting
  • seeking assistance of another person
  • introducing aids and/or attachments to prevent the wheelchair moving further into the boot during transport.

Any movements or actions involved with using aids and equipment to assist in moving unoccupied wheelchairs should also be assessed to address manual handling risks and ensure these risks are controlled. For example, lifting and manoeuvring ramps into position for wheelchairs can also cause injuries.
A Health and Safety Solution

The problem

Lifting heavy and awkward wheelchairs without assistance puts the worker at risk of injury to the back and shoulders.

A solution

Wheelchair carriers mounted to the tow bar of a vehicle reduces lifting and reaching for the worker.

Further Information

WorkSafe Advisory Service
Toll-Free 1800 136 089
Email info@worksafe.vic.gov.au
worksafe.vic.gov.au

Related WorkSafe Health and Safety Solutions
- Moving and supporting people with a disability
- Supporting people with personal hygiene care
- Assisting people in wheelchairs
- Occupational violence
- Moving/lifting objects
- Vacuuming
- Mopping
- Cleaning bathrooms
- Making beds
- Work related driving: Transporting people and moving equipment

Related publications
- Victorian home care industry occupational health and safety guide, 2005
  Available from worksafe.vic.gov.au and health.vic.gov.au

Australian Standards
- AS/NZS 2640:1994, Portable ramps for vehicles
- AS3693 – Wheelchairs—Nomenclature, terms and definitions
- AS3695 – Wheelchairs—Product requirements
- AS3696 – Wheelchairs
- ISO 10542-1:2001, Technical systems and aids for disabled or handicapped persons – wheelchair tie down and occupant – restraint systems
Appendix 5: Moving and lifting objects

A Health and Safety Solution

Moving and lifting objects

May 2011

What is the problem?
Moving and lifting objects such as equipment or furniture from the ground, low levels or above shoulder height.

What are the risks?
Workers may be at risk of musculoskeletal injuries (e.g., sprains, strains, fractures, and soft tissue injuries) to the back and shoulders when moving objects that are large, bulky, awkward, or difficult to handle.

Lifting, reaching, pushing, pulling, bending, and work requiring awkward postures such as working above shoulder height or below knee height may create risks.

Common sources of risk include:
- inappropriate storage facilities (e.g., shelves above shoulder height)
- lack of storage
- clutter that makes access and movement difficult
- uneven floor surfaces
- no or inappropriate equipment or aids to move objects
- a mismatch between the object to be moved and available moving equipment or aids
- not enough people to do the task
- limited time (e.g., needing to move objects quickly or no time to wait for assistance)
- heavy, awkward, or bulky objects.

What are solutions to the problem?

Systems
Before services are provided, employers should identify the risks and provide risk controls in consultation with workers and health and safety representatives.

Develop systems of work that:
- provide workers with information, instruction, training, and supervision in relation to work procedures and use of equipment
- provide hazard reporting processes so safety issues can be identified and fixed as soon as possible
- maintain equipment and aids in a suitable condition through regular maintenance and inspections

- provide and encourage use of mechanical aids instead of lifting by hand (e.g., self-height adjusting bin inserts in laundry trolleys)
- reduce the frequency of objects being moved
- identify weight, size, and recommended handling instructions for all relevant objects
- reduce bending or reaching by storing objects at waist height
- reduce the size or weight of objects
- match the number of workers to the task
- allocate sufficient time to complete activities.

Environment
- Provide storage facilities with adequate access for workers to move objects.
- Place frequently moved and large, bulky or awkward-to-handle objects on storage shelves above knee height and below shoulder height.
- Maintain floor surfaces in flat, undamaged condition with good slip resistance.
- Reduce clutter and minimise loose objects.

Equipment
- Store objects in smaller containers to avoid lifting and balancing heavy loads.
- Use lightweight, sturdy, stackable containers with wheels and handles to store or move objects.
- Maintain storage area doors so they can be easily opened and closed.
- Design and provide storage areas for outdoor or larger equipment
- Provide adjustable height trolleys for moving objects.
- Attach lockable castors to objects that can be wheeled.
- Provide suitable equipment for reaching objects or performing work above shoulder height.
- Place equipment on firm, non-slip surfaces.
- Maintain three points of contact when going up, down or standing on ladders (e.g., two feet and at least one hand or two hands and at least one foot).

(Continued over page)
A Health and Safety Solution Moving and lifting objects

The problem

Carrying heavy or unwieldy items may cause tripping or muscle injury.

A solution

A lightweight, collapsible trolley allows items to be transported safely.

Further information

WorkSafe Advisory Service
Toll-free 1800 136 089
info@worksafe.vic.gov.au
worksafe.vic.gov.au

Related WorkSafe publications

Manual Handling Code of Practice, 2000
Working safely in community services, 2006
Injury hotspot – Community support services, 2008
WorkSafe OHS compliance kits
Children’s services, disability services, home care, community support services
Volunteer health and safety – A handbook for community service organisations, 2008

The information presented in this Health and Safety Solution is intended for general use only. Whilst every effort has been made to ensure the accuracy and completeness of the Health and Safety Solution, the advice contained herein may not apply in every circumstance. Accordingly, the Victorian WorkCover Authority cannot be held responsible, and extends no warranties as to the suitability of the information for your specific circumstances, or actions taken by third parties as a result of information contained in the Health and Safety Solution.