## Manual Tasks Guide for Carers on Preventing Musculoskeletal Injuries from Performing Manual Tasks









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### Carers can get injured

This booklet is for people who care for other people with varying types and levels of disability in a home environment. It provides tips on how to prevent injuries associated with manual tasks.

Manual tasks, such as lifting, carrying, lowering, pushing, pulling, twisting, reaching, moving repeatedly and holding positions are the most common hazards for carers. These are closely followed by slips, trips and falls. These hazards usually lead to conditions that affect muscles, bones and joints, known as musculoskeletal disorders. Common musculoskeletal disorders include sprains and strains, spinal disc problems, tendonitis and osteoarthritis. The most common injuries for carers affect the lower back and shoulder.





This booklet is designed to help carers identify and minimise the risk of injury. It contains information on:

- How musculoskeletal disorders
   develop
- How to prevent injuries when performing manual tasks
- The risk management approach
- Manual tasks that are known to be of high risk to home carers
- Some examples of high risk manual tasks and ways of minimising the risks

## How do musculoskeletal disorders develop?

Musculoskeletal disorders usually develop as a result of gradual wear and tear of the body after frequent, prolonged or long term exposure to certain types of forces, movements, postures and vibration. These conditions may also present as sudden injury as a result of intense, strenuous or forceful activity.





#### What are the risks?

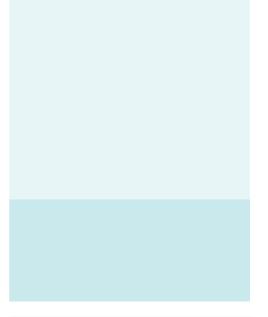
There are a number of things that may increase the risk of injuries, which are commonly referred to as risk factors. Some important risk factors associated with musculoskeletal injuries include:

- Awkward postures: working with your limbs or joints in an unnatural or uncomfortable position.
- Static postures: holding positions for a long period of time without a change in position.
- **Repetitive movement:** moving a certain joint/limb over and over again in the same manner.
- Overexertion: the force required by the person is greater than their abilities, therefore putting stress on their body.
- Vibration: from hand-tools (affecting the hands and wrists) or from sitting for prolonged periods on vibrating surfaces, such as the seat of a car (affecting the whole body).

## Where do risk factors come from?

Risks can come from a variety of different sources including:

- Area and layout: eg. the house may not be designed for wheelchairs or people requiring assistance.
- Equipment: eg. lack of equipment or limitations of equipment such as weight ratings, inappropriate wheel types for environment or load, lack of adjustability or inadequate maintenance
- Capacity of the person you care for: eg. inability to support their own weight due to muscle weakness, inability to understand instructions, have involuntary movements or have side effects from medication such as drowsiness.
- Nature of loads handled: eg. overloaded shopping bags.
- Environment: eg. poor lighting or wet floors.
- The way you do something: eg. working alone,working for long hours or lack of training.





### How can musculoskeletal disorders be prevented?

#### The risk of injury can be minimised by:

#### Being Aware

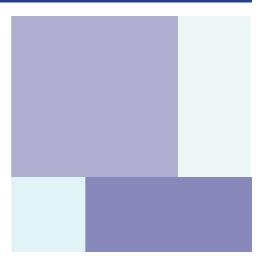
Everyone involved with a manual task should be aware of the different ways to reduce the risk of injury, including:

- People who provide the care you and other carers.
- The person you care for.
- Owner or head of the household who has control over home where the care happens.
- Employers of any support workers.
- Those who provide funding, assistance and/or equipment eg.
   Disability Services Commission (DSC),
   Department of Veteran Affairs (DVA),
   Community Aids and Equipment
   Program (CAEP), Home and
   Community Care (HACC).
- Those who provide assessments and recommendations for equipment (eg occupational therapists, physiotherapists, Aged Care Assessment Team (ACAT), Independent Living Centre (ILC).
- Those who train others how to use equipment (eg ILC, occupational therapists, physiotherapists, suppliers).

## Ensuring you can care for someone at home safely

Some of the key questions that should be considered before caring for someone at home are:

- What can the person do for themselves and how are care tasks usually performed? For example, can the person stand independently or roll independently in bed?
- Is the current home environment suitable for the mobility level of the person being cared for and the equipment being used? For example, if the person is in a wheelchair, can they access all areas?
- What equipment is available to you, as a carer? For example, does the person need a hoist and has that been made available?
- Is all equipment regularly maintained?
- Do you know how to use all equipment provided? For example, what are the risks associated with the equipment being used?
- Do you have the necessary skills and physical ability to provide care in the home?
- As the person's condition may deteriorate over time, you should continually consider whether you are able to provide sufficient care at home.





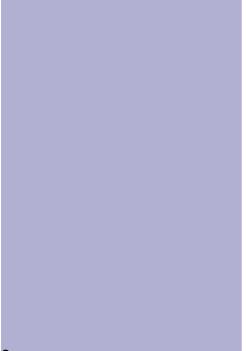
Good communication

It is vital that everyone involved with your family member's care is able to communicate clearly and freely with the others involved so that everyone's needs and requirements are considered.

## Training

Training is essential for all carers. The training should be task specific and include:

- Identifying and assessing risk factors.
- Improving your skills in problem solving so that you can work out an appropriate solution to each problem you come across.
- The use of manual task aids and equipment if used.
- Awareness of postures and actions that may reduce the risk of injury.





Due to differences in equipment and between brands it is important that you know how to use each piece of equipment. All mechanical equipment should be regularly maintained. The supplier will often provide instructions, and sometimes training, on how to use the equipment. However, further training by a healthcare worker may also be needed.

Refer to pages 22-23 for a list of useful organisations which can provide further information.

## Reducing the risk of injury

Spot the hazard: Which manual tasks have the potential to cause injury?

There are many manual tasks performed by carers that have the potential to cause injury when assisting people with physical transfers, mobility and activities of daily living.

Here are some manual tasks which are often performed by carers and have been associated with musculoskeletal injuries:



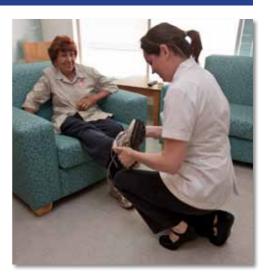
#### Transfers

#### Mobility

- Bed (rolling, moving up and down the bed)
- Bed to chair (and reverse)
- Chair to chair
- Bed to bed/ trollev
- Vehicle access
- Getting off the floor
- Equipment (slings, hoists, slide sheets)



- Standing
- Walking
- Walking with aids
- Wheelchair
- Stairs



#### Activities of Daily Living

- Dressing (including shoes)
- Showering/ bathing
- Toileting

#### Support Tasks

- Laundry
- Shopping
- Cooking
- Cleaning

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## Assess the risk: Understand the problem.

An important step is to understand why people can get injured when performing a manual task. Some risk factors have direct effects on the body and the risk of injury, including:

 Actions and postures (eg awkward, static or repetitive movements and positions).







 Overexertion (Heavy, awkward or unstable loads).



 Vibration both whole-body (eg sitting in certain vehicles) and hand-arm (eg using certain powered tools). Other factors contribute to the risk of injury by making the task more difficult, including:

 The environment, such as rough or slippery floors, uneven or variations in level (eg steps/ramps), poor lighting, the weather and loud noises.



- The way things are done such as the timing and order of manual tasks.
- Individual characteristics such as experience and/or physical limitations.

It is not uncommon for manual tasks to have several risk factors at a time. This can further increase the risk of injury.



The risk of getting injured will be greater when:

- A risk factor is at a high level (eg. lifting loads that are very heavy): intensity of risk factor.
- There are many risk factors present at the same time (eg. lifting a heavy load in an awkward posture): number of risk factors.
- The carer is carrying out risky manual tasks for long periods: duration.
- The carer is carrying out risky manual tasks frequently: frequency.

#### Control the Risk: Provide solutions

There are a variety of different ways to reduce the risk of injury. The best way is to eliminate the problem altogether. Some solutions may include:

- Changing the way the work is organised or carried out so that there is less risk eg. doing things in small steps to reduce fatigue, carrying out more strenuous activities during the day when the person's medication is effective.
- Changing the layout or other aspects of the environment, so that the task is easier and safer eg. improve lighting, move objects out of the way.
- Changing the load or getting the person to help more so less force is needed to complete task eg. get the person to cooperate more with a transfer so they do not resist or pull in the opposite direction.
- Provide simple and clear instructions to the person so they understand the task and can help as much as possible.
- Provide or improve the equipment and tools used so that the task is easier to do or less strength is needed eg. use hoists, slings, slide sheets.



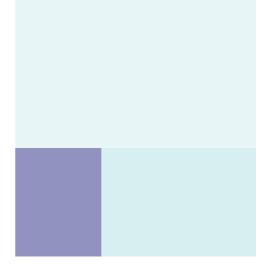
#### Follow-up and review

Review how the task was performed after the solutions were put in place. Check that the solutions have not created new problems or risks.

#### Training

Receiving training or guidance can reduce the risk of injury. However, even with training there may still be a risk of injury. If help is required in providing skills and knowledge, seek support from an appropriate professional such as a physiotherapist or an occupational therapist. Training should include skills on how to manage risks and how to perform difficult manual tasks safely.

Support workers who are employed should refer to WorkSafe WA's Code of Practice: Manual Tasks 2010 for further information on the duties of the employer and employee (listed under 'Useful Resources' at the back of this document).



#### Injury Management

Discomfort like pain, numbness, tingling or weakness should be attended to early. Review by a health professional for a diagnosis, information and treatment (if required) is important. Early treatment or advice about a musculoskeletal disorder may reduce the severity of the condition and length of recovery.



## **Handy Tips**

These tips may help carers with a task once a risk assessment has been completed.

#### Before the task

PLAN:

Plan to do difficult tasks when you have most energy or when the person has the most energy, so they can help too. Consider:

- medication side effects.
- normal sleep patterns of the person.
- meal times.
- fatigue.

GET WHAT YOU NEED FOR THE TASK:

Have all the appropriate aids/ equipment ready eg wheelchair, commode, hoist, towels, toiletries, slide boards.

 $\blacksquare$  Seek assistance if needed.

PREPARE THE ENVIRONMENT AND EQUIPMENT:

- ☑ Clear the path.
- ☑ Open doors.
- Check the destination.
- $\blacksquare$  Check the floor for slip and trip hazards.
- ☑ Turn lights on if needed.

 $\blacksquare$  Ensure places for rest breaks along the way if needed.

☑ Set up equipment in an easy to access location eg adjust bed/chair to the best height for the task, footplates off, bed bars down.

PREPARE THE PERSON

☑ Tell the person what you are doing and ensure they know what you want from them.

☑ Position the person in the best position for them to do as much as they can independently.

PREPARE YOURSELF

Mentally- concentrate on the task.

 $\ensuremath{\ensuremath{\square}}$  Think through the task and the positions that you need to be in.

☑ Test the ground surface for grip and stability before stepping onto it.

☑ Position feet apart to improve stability. (adopt wide base of support)

☑ Use a posture which will help avoid bending, over reaching and twisting.

☑ Get a good grip.

 $\blacksquare$  Test the load where possible.

 $\blacksquare$  Get further assistance if needed.

☑ Check your posture – keep the natural curves in your spine.

#### During the task

☑ Communicate with the person and anyone else assisting.

 $\ensuremath{\underline{\square}}$  Get the person to do what they can to assist.

☑ Use safety devices eg. brakes and equipment.

 $\blacksquare$  Keep arms and load close to your body.

 $\blacksquare$  Keep the load in line with the body where possible.

☑ Stop if it feels uncomfortable.

 $\blacksquare$  Look where you are going.

Avoid twisting (keep your body facing the one direction).

 $\ensuremath{\ensuremath{\square}}$  Where possible try to use your legs for power.

☑ Consider posture (keep the natural curves in your spine) and foot placement.

☑ Avoid awkward postures such as over reaching and twisting by moving yourself to a better position.

Don't rush - prepare to do the movement in small steps if appropriate.

 $\ensuremath{\ensuremath{\square}}$  Try and keep movements smooth and steady.

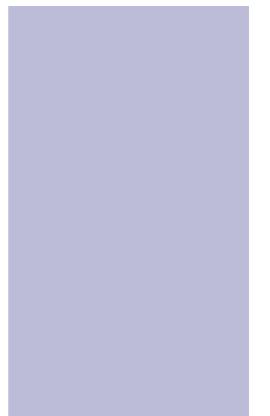
Breathe normally throughout the task.

#### After the task

☑ Review how the task was done – was there anything you did really well, is there anything you could improve?

 $\blacksquare$  Put away equipment and ensure area is safe.

☑ Consider if it will be safe for you to perform this task again with the current controls in place - do you need more equipment or assistance?





## Manual Task Examples

steam has reduced visibility.

This next section provides examples of manual tasks that may lead to musculoskeletal disorders. Task 1: Showering a client

disorders. Iask I: Snowering a cile	
Risk Factors	Possible Solutions
<ul> <li>Actions and Postures</li> <li>Using awkward and static postures when reaching and holding the shower hose and when reaching around the person.</li> <li>Bending repeatedly when helping wash the person's feet.</li> </ul>	<ul> <li>Avoid holding the shower head for long periods - place it in a bracket where possible.</li> <li>Get the person to hold the shower head for more directed water stream, where possible.</li> <li>Place objects in an easy to access location.</li> </ul>
<ul> <li>Forces and Loads</li> <li>Comprehension of instructions and mobility will vary between people.</li> <li>Ability to obtain a good grip may be limited.</li> <li>People that are immobile may be heavy or large.</li> </ul>	<ul> <li>Communicate with the person throughout the task.</li> <li>Get the person to help as much as they can.</li> <li>Use appropriate mechanical aids and equipment to reduce the load where possible eg slide boards, and a commode with larger wheels.</li> </ul>
<ul> <li>Environment</li> <li>Lack of space in the bathroom may lead to adopting awkward positions.</li> <li>Slip trip and fall hazards may be present because the floor is wet, there is a step into the shower or loose mats are on the floor.</li> <li>The task may be difficult to do because the lighting is inadequate or</li> </ul>	<ul> <li>Move unnecessary equipment and furniture out of the way.</li> <li>Use of a shower bench over the hob/ step if appropriate.</li> <li>Dry the floor before walking over it.</li> <li>Apply non-slip matting on floor if appropriate.</li> <li>Turn on the lights.</li> <li>Turn on exhaust fan to remove steam.</li> </ul>

#### **Risk Factors**

#### Work organisation and systems

- Workloads may be high.
- Assistance may be required.

#### Possible Solutions

- Do more difficult tasks when energy levels are high.
- Shorter showers to reduce time spent in awkward postures.
- Do tasks at a comfortable pace and methodically.
- Know your own physical abilities.
- Seek education and training to learn more.
- Be aware of limitations to movements and your ability to grip when you wear gloves, aprons or special footwear.





## Individual characteristics

- Age related changes affect people differently.
- We all have differing abilities.
- Our abilities change with experience and training.

#### Task 2: Transferring from Bed to Chair

Risk Factors	Possible Solutions
<ul> <li>Awkward and static postures may be adopted when reaching across the bed to help the person sit up, and then helping them across into the chair.</li> </ul>	<ul> <li>Get the person to help get themselves up – eg. rolling onto side and pushing up, using a hook or a rail.</li> <li>Set the bed and chair at the right height</li> <li>Keep the person close to avoid reaching and stretching.</li> <li>Position your feet to allow for weight transfer and stable base of support.</li> <li>Position the chair at an angle to minimise the amount of movement needed.</li> </ul>
<ul> <li>Forces and Loads</li> <li>Comprehension of instructions and mobility will vary between people.</li> <li>Ability to obtain a good grip may be limited.</li> <li>People that are immobile may be heavy or large.</li> </ul>	<ul> <li>Get the person to help as much as they can.</li> <li>Coordinate the transfer with the person using clear and simple instructions.</li> <li>Take the load away from your body by using mechanical aids and other equipment where possible eg. standing or cradle hoists.</li> </ul>
<ul> <li>Environment</li> <li>There may be limited space to assist easily.</li> <li>Slip and trip hazards may be present.</li> <li>Lighting in the room may be limited.</li> </ul>	<ul> <li>Ensure the lay-out of the room is suitable for manual tasks, such as transfers in the room.</li> <li>Move unnecessary equipment out of the way.</li> <li>Ensure that all slip (eq wet floors).</li> </ul>

- Ensure that all slip (eg wet floors) and trip (eg mats or clothing on floor) hazards are removed.
- Open the curtains to let in natural light or turn on the light.

#### Risk Factors

#### Possible Solutions

#### The way we do things

- Physical demand of several manual tasks in a row may lead to fatigue.
- Training may not be adequate.

#### Individual characteristics

- Age related changes affect people differently.
- We all have differing abilities.
- Our abilities change with experience and training.



- Do more difficult tasks when energy levels are high.
- Do tasks at a comfortable pace and methodically.
- Ensure that not all heavy tasks are done together.
- Undertake training where necessary in how to perform the task and operate/ use any equipment provided.
- Try different techniques to see what works best for you.
- Seek assistance where needed do certain tasks when there is someone else at home or visiting to help.
- Make use of carer respite services where appropriate.



#### Task 3: Walking with one assist

#### **Risk Factors**

#### Actions and Postures

 Awkward and static positions when reaching and holding the person's arm to support them, twisting around to provide support.

## Forces and Loads

- Movements may be unpredictable.
- Holding onto clothing may not allow adequate grip.

#### Possible Solutions

- Where possible, adopt a posture which maintains the natural curvatures of the spine, such as standing directly next to the person, supporting their arm and elbow to prevent twisting.
- Keep the person close to avoid reaching and stretching.
- Arrange for rest stops.
- Encourage use of handrails/walking aids.
- Explain to the person what you are doing and what you want them to do.
- Get the person to help as much as they can.
- Use walking belts to provide better grip.
- Set realistic goals.
- Prepare the environment.
- Prepare for glare and changes in lighting levels.
- Dry/sweep/clean the floor before walking.
- Ensure all floors are covered with a non slip surface.
- Clearly mark changes in surface levels.
- Warn the person when coming to changes in surface levels.

#### Environment

- Narrow corridors and doorways.
- Obstacles on the floor.
- Variations in ground level.
- Awkward postures and inability to adopt desired postures due to lack of space.



## **Useful resources/contacts**

#### Aged Care Assessment Team (ACAT):

www.agedcare.health.wa.gov.au Multiple sites across WA including: Royal Perth Hospital Ph: (08) 9370 9900 Sir Charles Gairdner Hospital

Ph: (08) 9346 2078

Osborne Park Hospital

Ph: (08) 9346 8111Swan HospitalPh: (08) 9347 5423Bentley HospitalPh: (08) 9334 3666

#### Arthritis & Osteoporosis WA:

www.arthritiswa.org.au 17 Lemnos Street, SHENTON PARK WA 6008 Ph: (08) 9388 2199 Fax: (08) 9388 4488 Email: general@arthritiswa.org.au

#### Australian Physiotherapy Association:

www.physiotherapy.asn.au WA Office Hampden House, 174 Hampden Road, NEDLANDS WA 6009 Ph: (08) 9389 9211 Fax: (08) 9389 9221 E-mail: wa.branch@physiotherapy

#### Carers WA:

www.carersaustralia.com.au 182 Lord Street, PERTH WA 6000 Ph: 1300 CARERS (1300 227 377)

Centrelink Carers Information: www.centrelink.gov.au

#### Community Aids and Equipment Program (CAEP):

www.disability.wa.gov.au Ph: 9426 9200 TTY: 9426 9315 Freecall: 1800 998 214 Email: caep@dsc.wa.gov.au

#### Department of Health WA:

www.health.wa.gov.au Ph: (08) 9222 0200 Email: healthpolicy@health.wa.gov.au

#### Department of Veteran Affairs (DVA):

www.dva.gov.au Level 5, AMP Building, 140 St Georges Terrace, PERTH WA 6000 Ph: 133 254 or 1300 55 1918 Regional callers: 1800 555 254

 Back to Basics (a useful resource on how to perform some specific care tasks whilst minimising the risk to your back)

#### Disability Services Commission (DSC):

www.disability.wa.gov.au 146-160 Colin Street, WEST PERTH WA 6005 PO Box 441, WEST PERTH, WA 6872 Ph: (08) 9426 9200 or 1800 998 214 Fax: (08) 92262306 Email: dsc@dsc.wa.gov.au

#### Home and Community Care (HACC):

www.health.wa.gov.au Aged Care Policy Directorate PO Box 8172, Perth Business Centre WA 6849 Ph: (08) 9222 4061 Fax: (08) 9222 2192 Email: haccwa@health.wa.gov.au

#### Independent Living Centre (ILC):

www.ilc.com.au The Niche 11 Aberdare Road, NEDLANDS WA 6009 Ph: 1300 885 886

## Occupational Therapists Association (OTA) WA:

www.otauswa.com.au 4A 266 Hay Street, SUBIACO WA 6008 Ph: (08) 9388 1490 Fax: (08) 9388 1492

#### WorkCover WA:

www.workcover.wa.gov.au 2 Bedbrook Place, SHENTON PARK WA 6008 Ph: (08) 9388 5555 Fax: (08) 9388 5550

#### WorkSafe WA:

www.worksafe.wa.gov.au 5th Floor, Westcentre, 1260 Hay Street, WEST PERTH WA 6005 Ph: 1300 307 877 Fax: (08) 9321 8973 Email: safety@commerce.wa.gov.au

 Code of Practice – Manual Tasks 2010 (A guide on how to assess and manage risks related to manual tasks detailing the key risk factors)

#### WorkSafe Victoria:

Community Services Industry www.worksafe.vic.gov.au Ph: (03) 9641 1444 or 1800 136 089 (toll free)

Email: info@worksafe.vic.gov.au

 Information on safety in the community services industry

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#### Arthritis & Osteoporosis WA:

www.arthritiswa.org.au 17 Lemnos Street, SHENTON PARK WA 6008 Ph: (08) 9388 2199 Fax: (08) 9388 4488 Email: general@arthritiswa.org.au

#### Department of Health WA:

www.health.wa.gov.au Ph: (08) 9222 0200 Email: healthpolicy@health.wa.gov.au





Department of Health

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