



MANAGING MUSCULOSKELETAL DISORDER RISKS GUIDE - HAZARDOUS MANUAL TASKS (NON-CLINICAL) IN AGED CARE

WORKERS IN THE AGED CARE RESIDENTIAL SERVICES SECTOR EXPERIENCE ONE OF THE HIGHEST NUMBERS OF MUSCULOSKELETAL INJURIES IN NSW. OVER ONE QUARTER OF THESE REPORTED INJURIES ARE FROM NON-CLINICAL WORKERS.

WHAT IS A MUSCULOSKELETAL DISORDER?

A musculoskeletal disorder (MSD) is an injury to, or disease of, the musculoskeletal system. The musculoskeletal system includes muscles, tendons, ligaments, joints, peripheral nerves and supporting blood vessels.

MSDs most commonly occur from gradual wear and tear to these parts of the body while performing hazardous manual tasks (HMTs). The parts of the body that are commonly affected in the aged care sector include the back, shoulder, wrist, knee and elbow.

WHAT IS A HAZARDOUS MANUAL TASK?

A HMT is a task that requires a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing that involves one or more of the following (as defined in the Work Health and Safety (WHS) Regulation):

- repetitive or sustained force
- high or sudden force
- repetitive movement
- sustained or awkward posture
- exposure to vibration.

When a worker is exposed to any of the above risk factors, there is a greater risk of a work-related MSD. Attachment 1 and 2 outlines the common manual tasks, their associated risk factors and potential controls in the kitchen and laundry areas.

There are also other risk factors such as psychosocial/organisational (e.g. high workloads, poor job design) that needs to be considered. These risk factors can be interrelated and therefore impact on each other. Attachment 3 outlines other factors that may contribute to MSD risks in the aged care residential services sector.

Examples of HMTs in non-clinical settings include:

- lifting and handling of large, awkward or heavy items e.g. cooking equipment
- exposure to awkward postures when loading/unloading the washing/drying machines in the laundry area
- maneuvering trolleys and equipment on carpeted surfaces or restricted spaces.

MANAGING RISKS FROM HAZARDOUS MANUAL TASKS

A person conducting a business or undertaking (PCBU) or an employer must manage risks to health and safety relating to MSDs that are associated with a HMT (Clause 60 of the Work Health and Safety Regulation 2017).

To manage risk, a PCBU must:

- identify hazards that could give rise to the risk
- eliminate the risk so far as is reasonably practicable

- if not reasonably practicable to eliminate the risk, minimise the risk by implementing control measures to reduce the potential of exposure to a hazard in accordance with the Hierarchy of Control
- maintain and review control measures.

An overview of the “risk management process for manual tasks” is explained in the SafeWork NSW Code of Practice – Hazardous Manual Tasks.

While this document refers to non-clinical MSD risks, clinical MSD risks such as patient transfers must also be assessed and controlled.

TALKING WITH YOUR WORKERS

PCBUs are required to consult their workers, so far as is reasonably practicable, on matters that may directly affect workers’ health, safety or wellbeing.

Consultation between PCBUs and workers is an essential part of effectively managing health and safety at work. It should not be viewed just as a legal requirement, but as a valuable means of informing and improving the PCBU’s decision making about health and safety matters.

In residential aged care, a PCBU must consult with workers and anyone else who carries out work for the business. For example:

- workers, health and safety representatives, contractors, on-hire workers, volunteers who perform manual tasks. They can provide valuable information about muscular discomfort they experience. Also, they can provide potential control measures to manage the MSD risks
- allied health professionals such as onsite physiotherapists and occupational therapists to identify and minimise MSD risks
- return to work coordinators and other healthcare staff to identify and understand injury trends and potential causes of MSDs.

It is important to consult with workers as early as possible when planning to, for example:

- identify, manage and control risks
- review and maintain control measures
- introduce new tasks or change existing tasks
- select new equipment

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- refurbish, renovate or redesign existing workplaces
- new development constructions
- carry out work in new environments.

IDENTIFYING HAZARDOUS MANUAL TASKS

HMTs can be identified by consultation, information review and observation of manual tasks.

Consult

- consult with workers, manufacturers, suppliers and others to identify the risk that may contribute to an MSD.

Review information

- workplace inspection and investigation reports, supplier/manufacturer's information, near misses, sick leave and health monitoring records.

Observe manual tasks

- conduct regular workplace walk-throughs/inspections and observe how workers perform their tasks, and whether equipment and procedure provided are suitable for the task.

The risks for HMTs in a non-clinical setting may come from a range of sources, including:

- design and layout of work areas e.g. poor access for mechanical aids such as trolley and carts in the laundry area
- nature of the item, equipment or tools e.g. trolleys that are not appropriate for the task or are poorly maintained making them difficult to push/pull
- nature of the load including heavy pots or bulky dry goods
- working environment e.g. slippery floors, poor lighting, cold temperature in cool rooms, and warmer temperature in laundry areas
- systems of work, work organisation and work practices e.g. repetitive tasks, inadequate breaks or task variety, unreasonable timeframes and workload.

ASSESSING THE RISKS

Please note that this step may not be necessary if you are dealing with a known risk with known controls.

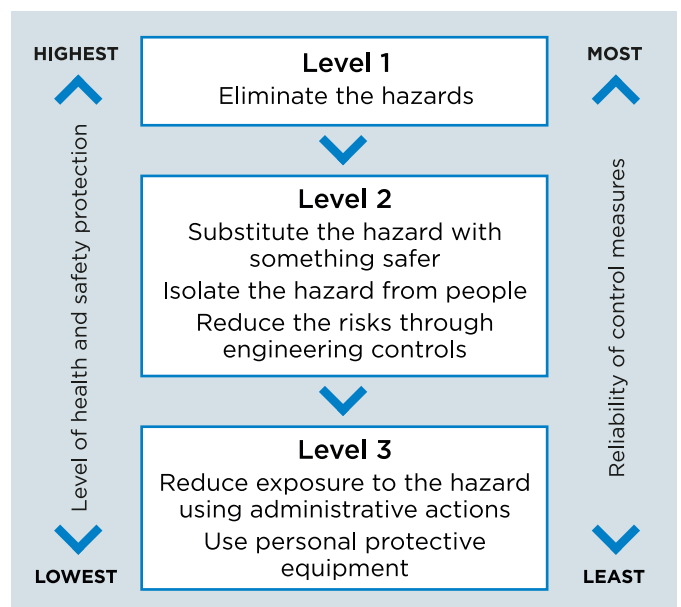
A risk assessment involves considering what could happen if someone is exposed to a hazard and the likelihood of it happening. For HMTs this means examining in detail the hazards associated with the task to assess the likelihood of the forces, movements and postures giving rise to an MSD. A risk assessment can help you determine:

- how severe a risk is
- whether any existing control measures are effective
- what action you should take to control the risk, and
- how urgently the action needs to be taken.

CONTROLLING THE RISK

When controlling hazards and risks associated with HMTs, PCBUs must follow the Hierarchy of Control as shown in Diagram 1.

Diagram 1: Hierarchy of Control



PCBUs should eliminate the source of the risk. For example, using automated equipment to wash plates, pots and pans to eliminate the need to wash manually.

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Where hazards cannot be eliminated, it should be minimised so far as is reasonably practicable by:

- substitution e.g. replacing a non-height adjustable table for a height adjustable table
- isolation e.g. isolate the hazard from people
- engineering e.g. installing an automatic dispensing system for cleaning detergent to reduce manual handling of chemicals
- administrative actions e.g. implement job rotation and rest breaks.

A combination of control measures is often used to manage MSD risks. Whilst higher level controls should be used wherever possible, administrative controls such as job rotation, task specific training etc. can be used in association with higher level controls to further reduce risk.

Administrative controls should not be relied on as the sole or primary method of controlling risk. For example, workplaces must not solely rely on “how to lift” type training (e.g. keep your back straight and bend your knees). This is because the risk factors causing the problem are not changed.

REVIEWING CONTROL MEASURES

Control measures that have been implemented must be reviewed, and, if necessary, revised to make sure they work as planned and to maintain a work environment that is without risks to health and safety.

You should review control measures:

- when the control measure is no longer effective
- before a change that is likely to give risk to a new or different risk
- if a new hazard is identified
- if consultation indicates a review is necessary
- if a health and safety representative requests a review.

TRAINING

Training should be provided during induction into a new job and as part of an on-ongoing manual task risk control program.

The PCBU should provide training that includes information on:

- risk management, including identifying, assessing, controlling and reviewing MSD risks
- specific manual task risks and the measures in place to control them
- how to perform manual tasks safely, including the use of mechanical aids, tools, equipment and safe work procedures
- how to report a hazard or a maintenance issue.

Training should be provided to:

- workers required to carry out, supervise or manage HMTs
- in-house designers, engineers and officers responsible for the selection and maintenance of equipment and/or the design and organisation of the job/task
- any health and safety representatives

ATTACHMENT 1: MANAGING MUSCULOSKELETAL DISORDER (MSD) RISKS IN THE KITCHEN

Kitchen workers such as cooks and kitchen hands perform a variety of manual tasks that involve one or more risk factors, such as repetitive movements, awkward postures, vibration or long duration. These manual tasks may include:

Manual tasks		Potential risk factors	Potential controls (examples)
Food preparation	Sorting, chopping, cutting, stirring	Repetitive movements, awkward postures, sustained postures, long duration	<ul style="list-style-type: none"> • Purchase pre-cut vegetables and fruits to reduce repetitive chopping and cutting, where possible. • Minimise the amount of repetitive movements, such as cutting and chopping by using suitable kitchen appliances. • Consider workplace design/layout e.g. ensure that enough space is provided for the tasks to be performed. • Provide height appropriate work benches to accommodate the various worker heights to reduce discomfort/injuries. • Keep knives sharp and perform regular maintenance on all cooking and cleaning tools. • Implement a job rotation program with rest breaks. • Provide workers with suitable safe work procedures and training as required.
	Using cooking appliances	Sustained postures, vibration	<ul style="list-style-type: none"> • Use suitable kitchen appliances for the task. For example, use a self-tipping bowl mixer where applicable. • Consult workers when purchasing new appliances (include the use of a pre-purchase checklist) and where possible, trial appliances prior to purchase. • Ensure cooking appliances are regularly inspected, serviced and maintained. • Provide workers with suitable safe work procedures and training as required.
Cooking/heating food	Oven/heating food	Awkward postures	<ul style="list-style-type: none"> • Provide easy access to oven e.g. install oven at a reasonable height to reduce excessive bending and overreaching. • Implement a maintenance program for ovens. • Provide workers with suitable safe work procedures and training as required.
	Pouring liquid from one container to another	Awkward postures, sustained postures, high force, sustained force	<ul style="list-style-type: none"> • Reduce the size of the container used to pour liquids. • Provide workers with suitable safe work procedures and training as required.

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Manual tasks	Potential risk factors	Potential controls (examples)
Food distribution	Pushing and pulling of equipment e.g. bain-marie/food warmer	<p>Awkward postures, sustained postures, high force</p> <ul style="list-style-type: none"> • Ensure the design of the food serving equipment is suitable to the workplace layout. • Implement a maintenance program for food serving equipment e.g. trolleys, bain-marie etc • Consult workers when purchasing new equipment (include the use of a pre-purchase checklist) and where possible, trial equipment prior to purchase. . • Provide workers with suitable safe work procedures and training as required.
Unloading, transferring and stocking items e.g. in fridges, transferring food from one location to another	Lifting and handling items	<p>High or sudden force, awkward postures, sustained postures</p> <ul style="list-style-type: none"> • If possible, reduce the size of the item to make lifting and handling easier e.g. food, chemical containers etc. • Ensure the layout of the fridge and storage area is appropriate to what is stored e.g. store frequently used/heavier items between knee and chest height. • If possible, ensure the kitchen is in close proximity to the food storage and loading dock area. • Use trolleys etc., to transfer and handle items where appropriate, and do not overload the equipment or restrict vision. • Use trolley ramps to gain access over kerbs and uneven surfaces when transferring items/ food from between locations. • Implement a maintenance program for the equipment. • Consult workers when purchasing new equipment (include the use of a pre-purchase checklist) and where possible, trial equipment prior to purchase. • Provide workers with suitable safe work procedures and training as required.
Washing dishes and other kitchen items	Washing and scrubbing	<p>Awkward postures, sustained postures, long duration, repetitive movements</p> <ul style="list-style-type: none"> • Use a dishwasher to eliminate awkward posture whilst manual dish washing. • When installing a dishwasher, ensure that the operational buttons and handles are within comfortable reach for all workers. • Ensure trolleys and dishwashers are at the same height when loading and unloading items. • If required, use a sink insert to reduce excessive bending when washing dishes and other kitchen items. • Implement a job rotation program with rest breaks. • Provide workers with suitable safe work procedures and training as required e.g. using the dishwasher.
Waste removal		<p>High force, awkward postures</p> <ul style="list-style-type: none"> • Use waste bins with wheels and of appropriate size.

ATTACHMENT 2: MANAGING MUSCULOSKELETAL DISORDER (MSD) RISKS IN THE LAUNDRY

Laundry workers perform a variety of manual tasks that involves one or more risk factors, such as repetitive movements, awkward postures or long duration. These manual tasks may include:

Manual tasks	Potential risk factors	Potential controls (examples)
Sorting of clothing, sheets and other items from one location to another	Repetitive movements, high force, awkward postures	<ul style="list-style-type: none"> • Reduce excessive bending by using spring-loaded trolleys. • Consider the design of linen skips to raise the height of the laundry bag. • Provide a height adjustable table for sorting tasks to accommodate workers with different heights. • Consider workplace design/layout e.g. ensuring that enough space is provided for the tasks to be performed. • Consider a colour coding system/or similar for the sorting of clothing, sheets and other items. • Implement a job rotation program with rest breaks. • Provide workers with suitable safe work procedures and training as required.
Loading/unloading clothing, sheets and other items into washing/drying machines	High force, awkward postures, repetitive movements	<ul style="list-style-type: none"> • Install washing/drying machines at an appropriate height to reduce excessive bending and handling of items into/out of the machines. • Consider workplace design/layout e.g. ensuring that enough space is provided for the tasks to be performed. • Implement a job rotation program with rest breaks. • Provide workers with suitable safe work procedures and training as required.
Handling of commercial size cleaning detergents for washing machines	Awkward postures, high force, sustained force	<ul style="list-style-type: none"> • Install an automatic dispensing system reducing the need to handle washing detergents. If this system is installed, ensure that a maintenance program is in place. • Provide workers with suitable safe work procedures and training as required.
Ironing/folding of clothing and other items	Repetitive movements, awkward postures	<ul style="list-style-type: none"> • If possible, use an ironing press for larger items. • Provide a height adjustable table for folding tasks to accommodate the various worker heights. • Consider workplace design/layout e.g. ensuring that enough space is provided for the tasks to be performed. • Consult workers when purchasing new equipment (include the use of a pre-purchase checklist) and where possible, trial equipment prior to purchase. • Implement a maintenance program for laundry equipment e.g. ironing press. • Implement a job rotation program with rest breaks. • Provide workers with suitable safe work procedures and training as required.

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Manual tasks	Potential risk factors	Potential controls (examples)
Returning of cleaned items to the resident (using trolleys)	High force, sudden force, awkward postures, repetitive movements	<ul style="list-style-type: none">• Consider workplace design/layout to ensure enough space is available for trolley movement.• Consider the design of the trolley to ensure it is suitable for the task being performed. Also ensure that any handles are within comfortable reach for all workers.• Consult workers when purchasing new equipment (include the use of a pre-purchase checklist) and where possible, trial equipment prior to purchase.• Implement a maintenance program for laundry equipment e.g. inspection of wheels.• Do not overload the trolley or restrict vision.• Provide workers with suitable safe work procedures and training as required.

ATTACHMENT 3: OTHER FACTORS THAT MAY CONTRIBUTE TO MUSCULOSKELETAL DISORDER (MSD) RISKS

Factors such as organisational and psychosocial factors can also contribute to MSD risks in the workplace. These risk factors can be interrelated and therefore impact on each other. These factors may include:

Risk factors	Potential controls (examples)										
<p>Organisational and psychosocial risk factors</p> <p>High job demand e.g. long work hours, high workload (too much to do, fast work pace or significant time pressure)</p> <p>Low job control where workers have little control over aspects of the work including how or when a job is done.</p>	<ul style="list-style-type: none"> • When designing work and work systems, the workplace should consider: <ul style="list-style-type: none"> - allowing additional time for the completion of difficult tasks - providing workers with control over their work pace and allow them to take breaks to manage their fatigue - increasing the level of practical support during peak workloads - consulting workers about how major organisational changes may affect them and listening to their views - involving workers for the purchase of new equipment - Workers' skills and experience when conducting the risk management process. 										
<p>Environmental conditions</p>	<table border="1"> <tbody> <tr> <td data-bbox="496 1010 847 1093">Lighting</td> <td data-bbox="847 1010 1487 1093"> <ul style="list-style-type: none"> • Ensure lighting is adequate and suitable for the task. </td> </tr> <tr> <td data-bbox="496 1093 847 1211">Slips, trips and falls</td> <td data-bbox="847 1093 1487 1211"> <ul style="list-style-type: none"> • Ensure there are systems of work for the identification and rectification of any slips, trips and falls risks. </td> </tr> <tr> <td data-bbox="496 1211 847 1330">Layout and space</td> <td data-bbox="847 1211 1487 1330"> <ul style="list-style-type: none"> • Ensure the work area is designed to allow enough space for workers to perform their tasks safely. </td> </tr> <tr> <td data-bbox="496 1330 847 1413">Ventilation and temperature</td> <td data-bbox="847 1330 1487 1413"> <ul style="list-style-type: none"> • Ensure adequate ventilation is provided and temperature is comfortable for workers. </td> </tr> <tr> <td data-bbox="496 1413 847 1731">Floors and other surfaces</td> <td data-bbox="847 1413 1487 1731"> <ul style="list-style-type: none"> • Ensure the design of the flooring or material installed (e.g. carpet, tiles) is suitable for the work environment and task performed e.g. install non-slip flooring surfaces in service corridors. • When working outdoor, consider the walking/ground surfaces e.g. pushing/pulling a trolley on even surfaces or slopes may increase the risk of an MSD. </td> </tr> </tbody> </table>	Lighting	<ul style="list-style-type: none"> • Ensure lighting is adequate and suitable for the task. 	Slips, trips and falls	<ul style="list-style-type: none"> • Ensure there are systems of work for the identification and rectification of any slips, trips and falls risks. 	Layout and space	<ul style="list-style-type: none"> • Ensure the work area is designed to allow enough space for workers to perform their tasks safely. 	Ventilation and temperature	<ul style="list-style-type: none"> • Ensure adequate ventilation is provided and temperature is comfortable for workers. 	Floors and other surfaces	<ul style="list-style-type: none"> • Ensure the design of the flooring or material installed (e.g. carpet, tiles) is suitable for the work environment and task performed e.g. install non-slip flooring surfaces in service corridors. • When working outdoor, consider the walking/ground surfaces e.g. pushing/pulling a trolley on even surfaces or slopes may increase the risk of an MSD.
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<p>Systems of work</p>	<p>Training, information, instruction and supervision</p> <ul style="list-style-type: none"> • Provide adequate training, information, instruction and supervision, in relation to risk management, safe use of equipment, and how to do the job safely etc. 										

Disclaimer

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