GOOD PRACTICE GUIDELINES

Moving and Handling People

December 2017

Guide for persons conducting a business or undertaking on managing the risks of moving and handling people in the health care industry.

ACKNOWLEDGEMENTS

WorkSafe would like to acknowledge and thank all those who contributed to developing these guidelines.

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These guidelines cover HSWA duties and risk management for PCBUs in the health care industry

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1 Introduction

IN THIS SECTION:

Moving and handling people can carry a serious risk

These guidelines supersede the 2012 ACC *Moving and Handling of People-the New Zealand Guidelines 2012*.

This update includes:

- changing the document's focus to be for persons conducting a business or undertaking
- simplifying the content
- explaining how moving and handling fits into the new work health and safety legislation
- changing the format so the guidance follows a PLAN-DO-CHECK-ACT approach.

1.1 Moving and handling people

Many countries, including New Zealand, have high injury rates among health care workers compared with other occupational groups. Health care workers have one of the highest rates of musculoskeletal disorders among all occupational groups.

Carers whose work involves moving and handling people are at risk of musculoskeletal injury. Carers who do the most moving and handling tasks each day are more likely to experience musculoskeletal injuries and pain. The use of suitable equipment reduces musculoskeletal strain and the risk of injury among workers.

Other factors, besides the physical workload, contribute to injuries and lead to workers taking sick leave. These include:

- irregular and long shifts
- lacking adequate sleep
- little control over workloads
- inadequate training
- an unsupportive work environment.

1.2 Work-related health risks and health-related safety risks

It is well recognised that work can affect a person's health, and a person's health can affect safety at work. Workers can become unwell or develop poor health from their work and work environment (work-related health risks). Similarly, poor health or physical and mental impairment may reduce a worker's ability to work safely (health-related safety risks).

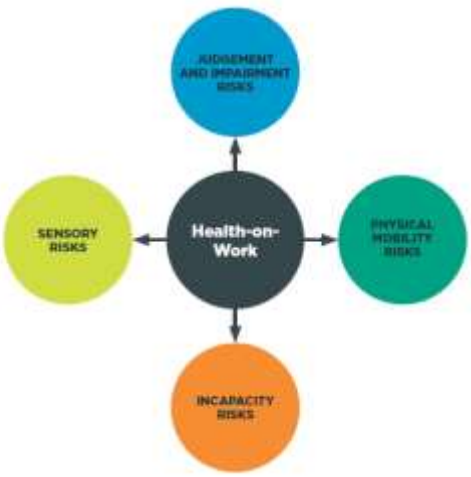

Figure 1. Examples of the effects of work on health and health on work

1.3 Integrating moving and handling into your larger health and safety management system

Because of the nature of health care, the health and safety risks that arise from moving and handling people will be among the risks you will need to manage within your business or undertaking. Managing those risks is a part of a larger health and safety management system (HSMS) for the worksite. Where a company or organisation has operations on several sites, it's vital to tailor systems to the needs of each.

Ensure communication is consistent for every part of your HSMS. Engage workers and health and safety representatives in the development, and make sure they're involved in and up-to-date with any changes to the systems.

Cover moving and handling programmes, and the larger HSMS, in induction, training, and regular reviews, so workers know the risks and how they're managed. Test emergency response regularly.

Record keeping is another aspect of safety management that should be consistent across every part of your HSMS. Make sure your records are backed up off-site.

WorkSafe New Zealand encourages persons conducting a business or undertaking (PCBUs) to use the PLAN-DO-CHECK-ACT approach described in Figure 2.

Figure 2: The PLAN-DO-CHECK–ACT approach

2 HSWA Duties

IN THIS SECTION:

PCBUs must ensure the health and safety of workers and other persons

2.1 Who has health and safety duties?

The Health and Safety at Work Act 2015 (HSWA) is New Zealand's key work health and safety legislation. It sets out the work health and safety duties that must be complied with.

All work and workplaces are covered by HSWA unless specifically excluded.

WorkSafe New Zealand (WorkSafe) is the work health and safety regulator.

Under HSWA, everyone at a workplace has health and safety duties. There are four types of people that have duties under HSWA – PCBUs, officers, workers and other persons at workplaces (see Table 1 for explanations about these duty holders).

All of these duty holders have duties in relation to health and safety at work.

2.2 What is a PCBU?

A PCBU is a 'person conducting a business or an undertaking'. It's a broad concept used throughout HSWA to describe all types of working arrangements.

- Businesses are usually conducted to make a profit – for example, a business run by a retailer or a self-employed person.
- Undertakings are usually not profit-making or commercial – for example, a government agency or a school.

Within the health care industry, a PCBU could be a rest home, a business that supplies at-home care, a self-employed carer working in a client's home, or a District Health Board (DHB), among others.

A PCBU must ensure, so far as is reasonably practicable, the health and safety of workers, and that no other people are put at risk by its work. This is called the 'primary duty of care'. An effective health and safety management system can help you to make sure that everyone comes home from work healthy and safe.

PCBUs also have a primary duty to provide information, supervision, training and instruction to workers. Training includes providing information or instruction and must be easy for workers to understand.

2.3 Officers

An officer is a person with a specific role in an organisation (such as a company director) or a person with the ability to exercise significant influence over the management of the business or undertaking. Organisations can have more than one officer. Officers could include, for example, a chief executive or board member of a DHB, or the director of a rest home.

Officers have a duty to exercise due diligence to ensure the PCBU complies with their duties under HSWA. Each officer has a duty – it is not a joint duty. As part of this duty, officers must ensure the PCBU has appropriate resources and processes to meet their health and safety duties, and verify that those resources and processes are used.

2.4 Managing risks under HSWA

Risks to health and safety arise from people being exposed to hazards (anything that can cause harm).

You are expected to manage work risks effectively. You must understand how to manage any changes to work processes or organisational changes that may increase risks, and make sure any new risks are managed.

Under HSWA, risks must be eliminated so far as is reasonably practicable. If a risk can't be eliminated, it must be minimised so far as is reasonably practicable.

'Reasonably practicable' means doing what is reasonably able to be done to ensure health and safety, having taken into account and weighed up all relevant matters, including:

- how likely the hazards or risks are to occur
- how severe could the harm that might result from the hazard or risk could be
- what a reasonable person knows or ought reasonably to know about the risk and the ways of eliminating or minimising it
- what measures exist to eliminate or minimise the risk (control measures)
- how available and suitable are the control measures(s)

Lastly, what is the cost of eliminating or minimising the risk and is it grossly disproportionate to the risk. Cost can only be used as a reason not to do something when it is grossly disproportionate to the risk.

For further information, read WorkSafe's fact sheet *Reasonably Practicable*.

For guidance on how to manage work risks: see WorkSafe's quick guide *Identifying, Assessing and Managing Work Risks.*

As moving and handling people is necessary in the health care sector, it is unlikely that you will be able to fully eliminate the risks. Instead you should have processes in place to effectively manage the risk and minimise the potential for harm to occur at your workplace.

2.5 Involving workers

Everyone at a workplace can help to make it a healthy and safe place to work. All PCBUs must involve their workers and health and safety representatives in workplace health and safety matters by:

- engaging with workers on health and safety matters that may directly affect them, so far as is reasonably practicable
- having worker participation practices that give workers reasonable opportunities to participate effectively in improving health and safety on an ongoing basis.

A healthy and safe workplace is more easily achieved when everyone involved in the work communicates with each other about hazards and risks, talks about any health and safety concerns and works together to find solutions.

Engage with workers and their representatives:

- find out how health and safety issues affect how they organise, manage and carry out their work
- seek their views when you are identifying, assessing and deciding how to deal with work risks
- encourage them to share ideas about what should be included or updated in health and safety documents
- include people with a range of technical and operational knowledge and experience.

Workers' suggestions can lead to better and safer ways of working. Managers should meet employees frequently to discuss health and safety issues, and to respond quickly to the safety suggestions and

concerns they raise. One way of doing this is by putting safety issues as a standard item on routine meeting agendas.

Having worker representatives is one way for workers to participate. Well-established ways to do this include having health and safety representatives (HSRs), Health and Safety Committees (HSCs) and unions. Other representatives can include community or church leaders.

For further guidance on worker engagement, participation and representation see:

> WorkSafe's good practice guidelines *Worker Engagement, Participation and Representation*
> WorkSafe's interpretive guidelines *Worker Representation through Health and Safety Representatives and Health and Safety Committees*.

2.6 Working with other PCBUs

More than one PCBU can have a duty in relation to the same matter (overlapping duties).

PCBUs with overlapping duties must, so far as is reasonably practicable consult, co-operate and co-ordinate activities with other PCBUs so that they can all meet their joint responsibilities. PCBUs do not need to duplicate each other's efforts.

Noone can contract out of their duties, but can enter reasonable agreements with other PCBUs to meet duties. However, all PCBUs retain the responsibility to meet their duties. . The PCBUs should also monitor each other to ensure everyone is doing what they agreed.

The extent of the duty to manage risk depends on the ability of each PCBU to influence and control the matter.

For further guidance on overlapping duties see WorkSafe's guide *Overlapping duties.*

Duty holder	Explanation
PCBU ("you" in these guidelines)	A PCBU is a 'person conducting a business or undertaking'. A PCBU may be an individual person or an organisation. It does not include workers or officers of PCBUs (to the extent they are solely workers or officers), volunteer associations (that do not have employees), or home occupiers that employ or engage a tradesperson to carry out residential work. A PCBU must ensure, so far as is reasonably practicable, the health and safety of workers, and that other persons are not put at risk by its work.. A PCBU plays an important role in protecting its workers' physical and mental health.
Officer	An officer is a person who occupies a specified position or who occupies a position that allows them to exercise significant influence over the management of the business or undertaking. This includes, for example, company directors and chief executives. Officers must exercise due diligence to ensure that the PCBU meets health and safety duties and obligations.
Worker	A worker is an individual who carries out work in any capacity for a PCBU. A worker may be an employee, a contractor or sub-contractor, an employee of a contractor or

	sub-contractor, an employee of a labour hire company, an outworker (including a homeworker), an apprentice or a trainee, a person gaining work experience or on a work trial, or a volunteer worker. Workers have a duty to take reasonable care to keep themselves and others healthy and safe when carrying out work, to comply as far as they are able with any reasonable instruction given by the PCBU, and to cooperate with any reasonably policy or procedure relating to health and safety..
Other persons at workplaces	Examples of other persons at workplaces include workplace visitors, casual volunteers at workplaces and clients. Other persons have duties to take reasonable care for their own health and safety and to take reasonable care that they don't harm others at a workplace, and to comply as far as they are able with any reasonably instruction given by the PCBU..

Table 1: Description of duty holders

3 Risk Management - Plan

IN THIS SECTION:

Assessing moving and handling in your business or undertaking is the first step to minimising the harm arising from it.

Planning means identifying hazards and assessing risks in a workplace, and putting in place systems to manage those risks. The first step is to identify hazards at the site. Look at the whole operation from a high level and work down. Work-related health risks can be harder to identify, as they can be invisible and effects may take years to impact on a worker's health.

Engage workers with a range of experiences and expertise, including HSRs, to work on identifying hazards. They need to follow a systematic approach to identify all potential hazards. Examples of identification methods include:

- consulting workers with different experiences and backgrounds
- inspecting the workplace
- reviewing available information
- asking "What could potentially harm a worker's health in this workplace or through the work they do?"

3.1 Identifying moving and handling people hazards

To identify hazards related to these moving and handling tasks, consider the following factors:

Client assessment (load) - Client characteristics that can affect moving and handling risks include (but are not limited to) size and weight, level of dependency and mobility and extent of client compliance.

An example of a specific system or approach for client risk assessment, known as the 'LITEN-UP' approach has been used in some facilities in New Zealand since 2003 and is suitable for use where a health care provider wishes to use a specific client risk assessment system. Appendix 3 provides more detail on the LITEN-UP approach.

Carer assessment (individual) - The capabilities of carers involved in moving and handling clients include their physical ability, training related to moving and handling, level of stress and fatigue and the number of other carers involved.

Task assessment - A task assessment includes identifying the specific type of moving and handling task, matching the moving and handling procedure with the load and task, and ensuring that the equipment needed for the task is available.

Environmental assessment - An environmental assessment includes the physical space, equipment available, floor surfaces, clutter, lighting, noise and temperature.

3.2 Assess the risks

Once you've identified each hazard, you must assess the risks of it causing harm. This means assessing likelihood and consequence.

Think about:

- who might be exposed to the hazard
- what the potential consequences of exposure to the hazard are (eg what severity of injuries or ill-health could result? Could people be killed or develop long-term health issues?)
- how likely the consequences are (eg very likely, likely or unlikely under usual business conditions).

Using the above information, decide which work risks you need to deal with. Then decide which risks you will deal with first (eg risks with potentially significant consequences such as chronic ill-health, serious injury or death, or those with a high likelihood of occurring).

You must then decide which control measures are most appropriate. We recommend that you apply the hierarchy of controls as described below to choose the most effective control measures in your circumstances.

the first step is to try to eliminate risks so far as is reasonably practicable. If elimination is not reasonably practicable, the risk needs to be minimised, so far as is reasonably practicable. The hierarchy is shown below.

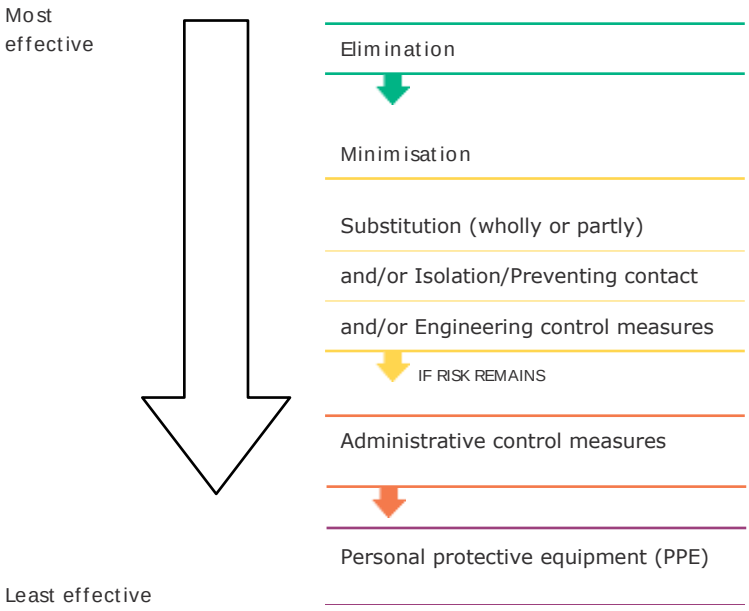

Figure 3. Hierarchy of controls

ACTION		WHAT IS THIS?	EXAMPLE
Eliminating		Removing the sources of harm (eg equipment, substances or work processes).	Removing a trip risk or getting faulty equipment repaired. Prefabrication of components to eliminate cutting (to eliminate risks from airborne contaminants, vibrations and noise). Using non-toxic glue instead of a toxic glue. Using water-based paint instead of solvent-based
Minimising	Substituting	Substituting (wholly or partly) the hazard giving rise to the risk with something that gives rise to a lesser risk (eg using a less hazardous thing, substance or work practice)	Buying quiet plant, equipment and vehicles. Using methods that produce less vibration (eg using a cut off saw instead of an angle grinder).
	Isolating/ preventing contact	Isolating the hazard giving rise to the risk to prevent any person coming into contact with it (eg by separating people from the hazard/preventing people being exposed to it). Isolation focuses on boxing in the hazard or boxing in people to keep them away from the hazard.	Fitting screens or putting up safety barriers around the hazard for example: welding screens can be used to isolate welding operations from other workers barriers and/or boundary lines to separate areas where forklifts operate near pedestrians in the workplace. Using fully automated processes for example: using an automated arm to remove objects from degreasing baths using fully automated spray booths that don't require anyone to enter
	Imposing engineering control measures	Using physical control measures including mechanical devices or processes.	Modifying tools or equipment, or fitting guards to machinery. Using extraction ventilation to remove harmful substances
	Imposing administrative control measures	Using safe methods of work, processes or procedures designed to minimise risk. It does not include an	Requiring all people to walk only within the painted pedestrian zones when on the factory floor. Having emergency plans and evacuation procedures in place.
	Using personal protective equipment (PPE)	Using safety equipment to protect against harm. PPE acts by reducing exposure to, or contact with, the hazard.	Using safety glasses, overalls, gloves, helmets, respiratory gear and ear muffs associated with jobs such as handling chemicals or working in a noisy environment. PPE is the least effective control and

Table 2. Defining the hierarchy of controls

Section 4 discusses control measures for the risks inherent in moving and handling people, primarily in the context of an overarching moving and handling programme.

4 Risk Management - Do

IN THIS SECTION:

One risk may need multiple control measures to adequately manage it.

Once planning and assessment are complete, it's time to put in place the control measures. If elimination is not practicable, you need to minimise that risk, so far as is reasonably practicable.

In the hierarchy, minimising means taking one or more of the following actions that is the most appropriate and effective taking into account the nature of the risk:

- substituting with a lower risk activity
- isolating people from the hazard/preventing people being exposed to the risk
- applying engineering control measures
- administrative control measures, including:
  - shift rotation
  - regular equipment maintenance
  - PPE - it is also essential and effective in many situations

4.1 Moving and handling programmes

A moving and handling people 'programme' takes policy into practice by creating processes and procedures by which the risks will be managed. Moving and handling programmes should include incident and injury investigations and follow-up action like improved control measures (e.g. retraining workers, modifying facilities, and acquiring additional equipment) and programme evaluations.

Moving and handling programmes significantly reduce the rates of injury resulting from client moving and handling, as well as the associated costs. Programmes that are successful in reducing injuries to health care workers need multiple components, such as support from management, an appropriate policy, training, risk assessments, equipment, facility design, auditing and reviews. There are also financial savings through lower costs from injuries, and reduced worker absenteeism and turnover.

Each facility needs to develop its own system that can be easily conducted and clearly communicated to all workers involved in moving and handling people.

Training workers in people moving and handling techniques alone is ineffective in reducing injuries. Only a moving and handling programme with multiple components is effective in reducing back problems and other injuries among health care workers.

4.2 Core components of moving and handling programmes

- a policy on moving and handling people
- clear allocation of health and safety responsibilities
- worker management processes including training and assessment
- equipment management
- risk assessment protocols, documentation and an incident reporting system
- provision and maintenance of moving and handling equipment
- facilities that are designed or modified for moving and handling people
- client management procedures from initial assessment to discharge/end of care
- work organisation and practices changed (e.g. developing a culture of safety, work allocations that avoid repetitive work and long hours)

4.3 Policies

The reason for developing and using a moving and handling policy is ultimately to reduce the risk of injury to workers and health care clients. Having such a policy helps to create a workplace culture where

workers are trained, equipped and supported always to use safe moving and handling techniques and equipment.

A moving and handling policy should be part of an organisation's broader set of health and safety policies, and often needs to be integrated with existing policies, for example those covering health and safety for both clients and workers, and the quality of health care for clients.

Once you have identified the hazards, develop some high level policies for each. These should be clear statements of commitment to managing health risks, and include broad aims and performance targets for each one. Each policy should be reinforced through periodic review and involvement of management.

4.4 Roles and responsibilities

Senior management need to be 'visible' in providing strong leadership for workplace health and safety, and understand that they cannot contract out of their duties under HSWA. This includes support for the promotion of a safety culture generally. This includes:

- ensuring there is a health and safety manager or representative in the organisation
- providing an effective training programme for new workers, especially for workplace tasks requiring specialist skills
- including health and safety issues in organisational communications
- providing resources for equipment and resources that reduce workplace hazards and risks
- involving workers in safety reviews and decisions.

Other roles for management include:

- establishing high standards of performance for moving and handling programmes
- providing timely responses to safety incidents and concerns in a constructive manner
- ensuring the operation of rosters and work shifts does not compromise safety
- regularly communicating information on safety performance indicators.

Management and workers need to be up to date with developments in equipment design and application and other physical resources for workers, including PPE and the design of workplaces. For reducing hazards in moving and handling, there are ongoing developments in equipment and facility design. Management needs to ensure that the health and safety section keeps up to date with these advances and provides input into upgrading equipment and facility design. Changes and progress should be communicated clearly throughout the business or undertaking.

In large organisations, such as DHBs, there are likely to be established occupational health and safety stand-alone sections with overall responsibility for monitoring safety-related operations in the entire organisations. Health and safety operations need adequate resources as they need to be an integral part of the organisational culture of safety. The units should provide input into all training programmes to ensure hazard identification and workplace safety are included.

Other key roles for health and safety managers are meeting employees frequently to discuss safety issues, and responding quickly to safety suggestions and concerns raised by employees.

In small organisations, specific individuals may be given responsibility for workplace health and safety. In this case, all workers should know who those people are and that they can be consulted by anyone.

4.5 Facility design

Whether you're planning a new facility or upgrading an existing one, designing accessible, fit-for-purpose spaces will go a long way towards managing the risks in moving and handling people.

Opportunities to incorporate good practice for moving and handling people in facility design include planning a new facility and undertaking minor renovations or a major upgrade of an existing facility. For facilities with limited resources, and for home-based care, upgrading existing facilities is often the most feasible option to make existing workspaces safer for both clients and carers.

There are also likely to be other benefits, such as improvements in the quality of care, increased carer morale and decreased associated costs. There are also potential benefits for clients.

Design standards

Health facility design standards relevant to New Zealand include:

- the Building Regulations (1992) (within the Building Act (2004))
- the Building Code, which is the First Schedule to the Building Regulations
- New Zealand Standard 4121:2001 Design for access and mobility: Buildings and associated facilities (NZS 4121 Design for Access)

NZS 4121 Design for Access recommendations are not suitable for dependent disabled people who require assistance from one or two carers. For example, the bathroom recommendations are too small to allow sufficient space for carers and moving and handling equipment.

The New Zealand Ministry of Health generally requires use of the Australasian Health Facility Guidelines (Australian Health Infrastructure Alliance, 2009) for buildings and facilities for DHBs.

Assessing existing spaces for upgrading

A key phase in building and facility renovations is to carry out a review and assessment of the existing spaces in terms of their suitability for moving and handling. The main features relevant to assessing existing spaces for building renovations are likely to include:

- the current mobility profile of clients
- an inventory of existing moving and handling equipment
- what additional equipment is required for improving client mobility and carer safety
- spaces required for moving and handling
- modifications needed to existing spaces
- future-proofing the facility for changes in types of client or facility use.

New building design	Ceiling track specified Minimum width specified for doors and corridors Client rooms Bathroom design Equipment storage Areas for bariatric clients
Renovating or upgrading an existing facility – may range from specific and relatively minor modifications to major changes, possibly including structural changes	Doorways widened Bathroom redesigned Ceiling tracking installed or retrofitted Equipment storage added Access for mobile hoists Ramps to doorways Grab rails

Table 3. Opportunities for improvement

Facility design process

With any facility development, it is important to use a systematic approach so that physical spaces needed for moving and handling people are given adequate consideration.

Access design features

The design of all health care facilities should enable independent mobility by clients and allow carers to work with clients in ways that reduce risks to clients and carers. Effective moving and handling places additional design requirements on facilities. Extra space is needed for carers to work alongside clients and to allow suitable equipment to be used. How much extra space is needed depends on the number of carers required, the level of mobility of clients, the equipment being used and the specific techniques used to move people, and possible changes in the profiles of clients in the facility or unit.

Areas for consideration include:

- corridors
- floor spaces for passing and turning
- minimum turning spaces
- doorways
- flooring
- ramps
- handrails
- bedrooms
- toilet spaces
- shower rooms
- combined shower and toilet rooms
- rooms with baths
- day and dining rooms
- clinical suites
- other client handling areas, including:
  - lifts in multi-storey buildings
  - external access to buildings
  - outdoor areas such as gardens.
- worker and client call systems

4.6 Staffing

Ensure you have enough workers to perform necessary moving and handling tasks, to minimise the risk to them.

Many moving and handling tasks require more than one carer. It's vital that adequate staff are employed and rostered on, or carers may attempt those tasks alone, seriously increasing the risk of injury. It's also important to have enough workers to accommodate leave being taken. Overworked workers are at risk of fatigue, which can increase the risk of injury.

4.7 Training

Staff must be trained to perform moving and handling tasks, to minimise the risk that those tasks could injure them.

Effective systems for training workers are crucial for developing a culture of safety. Training programmes and workshops should cover the range of technical skills needed to identify hazards and risks in the workplace and the use of procedures that reduce those risks.

Why is training important?

Training is a vital part of implementing moving and handling because it:

- provides information about policies and protocols for moving and handling
- teaches workers how to identify and assess client moving and handling risks
- provides workers with the skills they need to manage the risks

- supports professional growth by developing staff knowledge and skills
- encourages workers to take personal responsibility for safety in the workplace
- helps PCBUs and workers to meet their legal responsibilities
- enhances client safety and preserves their dignity.

Training should be comprehensive and cover organisational policies, risk assessment and documentation, handling techniques and use of equipment. Where feasible, training should be tailored to participants' knowledge and awareness of risks, and their specific work environments.

The training needs of workers working in aged care and the community differ from those of workers in acute hospitals. Aged-care and community-based workers require training programmes that address their specific moving and handling requirements. Home care and community organisations need to consider organising their own training programmes using the assistance of external providers to provide the expertise and support required.

Who needs to receive training?

Training should be required for all workers directly involved in moving and handling people, as well as their managers and supervisors. Workers and carers directly involved in moving people include, but are not limited to, nurses, physiotherapists, occupational therapists, medical staff, ambulance staff, carers and people working with the disabled and aged in the community.

When is training needed?

Training should be provided in the following instances:

- when a new worker starts, if their work requires them to move and handle people
- update courses for existing workers who have already attended orientation training in moving and handling
- when new equipment or work practices are introduced
- as remedial action following an incident or near miss
- for workers in areas that require techniques or equipment that are more specialised (e.g. care of clients with spinal injuries).

Core competencies in moving and handling training

The purpose of training workshops is to provide carers with practical skills and knowledge to reduce the risks involved in moving and handling in the workplace. The core components of training should cover:

- theory – covering definitions of moving and handling, New Zealand legislation, hazard identification, risk assessment, and relevant policies of the organisation
- practical skills – including completing risk assessments, techniques used for sitting and standing, bed mobility, lateral transfers, and hoists and other equipment for moving and handling people.

Training session outcomes

At the conclusion of a training session, keep a record of each trainee's attendance and provide a certificate that verifies their participation in training. Trainees should be assessed on the knowledge and skills taught in the session by the trainers. Trainees can also do self-assessments or peer assessments of their skills.

Evaluation of training sessions and workshops

Trainers should routinely gather feedback from trainees so that the moving and handling coordinator and the trainers can assess the effectiveness of the training sessions. This can be done using a brief evaluation form handed out to participants at the end of the training session

4.8 Equipment

Equipment is a core component in effective moving and handling programmes, together with risk assessments, the use of correct techniques, staff training and appropriate facility design. The supply of equipment by itself will not lead to reduced rates of injury unless equipment use is part of a

comprehensive moving and handling programme. Successful programmes provide both equipment and training in how to use specific items of equipment for lifting, transferring and repositioning people.

The proper use of equipment is essential for the safety of both clients and carers and improves the quality of client care. Equipment can also facilitate client rehabilitation, decrease morbidity and preserve the dignity of clients. Compared with techniques that involve manual transfers of people without equipment, the use of equipment lessens the forces required for moving and handling people and can reduce the risks.

Moving and handling equipment also improves client outcomes, such as reducing their length of stay and the risk of complications such as deep vein thrombosis, chest infections, urinary tract infections, pressure ulcers, skin tears and falls.

Equipment management

The day-to-day management and monitoring of moving and handling equipment may be the responsibility of a manager in facilities, health and safety, engineering or maintenance. Maintenance responsibilities may also be delegated to specific people. Within management systems, there should be clearly negotiated areas of responsibility about who monitors the equipment and its use, who is responsible for carrying out routine checks and maintenance, and who pays for any repair and maintenance costs.

Managers responsible for purchasing equipment, and people providing training in equipment use, need to keep up to date with developments in equipment for moving and handling people.

Types of equipment

The main types of equipment that are commonly used can be summarised within the four main groups of client moving and handling tasks. These groups of tasks are:

- sitting, standing and walking
- bed mobility
- lateral transfers
- hoisting.

Sitting, standing and walking	Sitting to standing from a chair	Transfer belt, standing hoist, mobile hoist, chair-lifter
	Standing to sitting on a bed	Transfer belt
	Assisted walking	Transfer belt, walker, gutter frame, hoist with walking harness
Bed mobility	Turning in bed	Slide sheets, electric bed with turning function
	Sliding client up in bed	Slide sheets, electric bed
	Sitting person up onto edge of bed	Slide sheets, electric bed, bed accessories
Lateral transfers	Lateral transfer from bed to stretcher	Slide sheets, transfer board, air mattress, standing hoist
	Transferring from chair to commode	Ceiling hoist, mobile hoist, seated transfer board, standing hoist
	Transferring to toilet	Ceiling hoist, mobile hoist
Hoisting	Fitting a sling to client in bed	Sling

	Hoisting from bed to chair	Ceiling hoist, mobile hoist, standing hoist
	Hoisting client from floor	Ceiling hoist, mobile hoist, air jack
	Transferring to toilet	Ceiling hoist, mobile hoist, standing hoist

Table 4. Types of equipment

Storage

The number of storage areas, and where they are located, depend on the layout of the main facility rooms and on the types of moving and handling equipment used. Some things to consider when planning storage areas are:

- space for both large and small items of equipment
- storage areas needing to be located in the ward or unit
- storage areas should not block or reduce access ways
- doorways should be at least 1,2m wide for storage areas for large equipment items such as mobile hoists.

For mobile and standing hoists and other battery-operated equipment, it is important to ensure that such equipment is stored close to where it will be used. If it is stored too far away, carers may be reluctant to use the equipment because of the increased time to access it. Such equipment should be available within 2m of its primary area of use. A preferred option is directly off a main corridor in a recessed alcove with a power supply.

Items of equipment used together should also be stored together. For example, slings, mobile hoists and spare hoist batteries should be stored together. Transfer boards should have slide sheets stored with them for ease of use. Equipment that is battery operated, such as mobile hoists and standing hoists, may need storing close to a power point so that the batteries can be charged.

Standardise storage areas as much as possible across units or wards so that when workers rotate to different units they can find equipment easily.

Avoid using storage rooms for damaged equipment.

Equipment procurement

Given the wide range of types of equipment and the need to invest time in assessing equipment prior to purchase, it is important for health care facilities to provide effective procurement systems for purchasing equipment for moving and handling people.

CONSULTATION

When purchasing equipment, especially during the design or redesign of the work environment, consulting people whose jobs will be affected by the new equipment is essential.

HIRING EQUIPMENT

For some facilities, hiring or leasing equipment may be more cost effective than purchasing equipment. Ensure that the hire agreement includes information about the ongoing responsibilities for cleaning and maintenance of the equipment. Allocating responsibility for any replacements following damage or breakdown is also important, along with expected timeframes and any associated costs.

Equipment register

One of the management tools often used in an equipment maintenance system is an equipment register. This register can be in the form of a logbook, spreadsheet or customised asset management software. Whatever form it takes, it should allow regular monitoring of essential information regarding equipment location, use and maintenance. Decisions about who makes purchasing or procurement decisions, when equipment should be replaced, and how obsolete equipment will be disposed of, are management planning roles.

To establish an equipment register it is necessary to develop a list of all moving and handling equipment held by the organisation or facility.

Equipment maintenance

The purpose of maintenance is to ensure that equipment can be operated as intended. The maintenance system needed for equipment will be related to its complexity. Maintenance for many types of equipment will typically cover three types of check:

- Visual checks or assessments prior to each use
- More extensive periodic checks
- Scheduled service checks that are carried out by authorised people.

Where an organisation owns equipment that is on loan to clients, such equipment should be included in the organisation's maintenance programme unless it comes to some other arrangement with the client. For community or home care, moving and handling equipment may be privately owned by a client or their family. Although the owner of the equipment has responsibility for its servicing and maintenance, the carer or other user has a responsibility to carry out a visual check of the equipment prior to each use.

Replacing and upgrading equipment

Organisations should develop policies and assessment criteria related to replacing and upgrading moving and handling equipment. These should include purchasing and leasing new equipment to replace obsolete items and replacing worn and damaged equipment or parts.

Replacing obsolete equipment should be done after an assessment by a competent person (such as an equipment coordinator) and consultation with workers using the equipment. The replacement and upgrading of equipment could also be discussed with suppliers before the equipment is purchased.

Disposing of equipment

Where possible, recycle equipment by giving it to other organisations or individuals in the community who can make use of it as long as it is safe to do so; otherwise it must be destroyed. The recipient must be informed of what needs to be carried with the equipment (e.g. replace a part) before it can be used again, if such action is required before use. Equipment marked for disposal can also be used as a source of spare parts.

Check with the suppliers or manufacturers on how 'dead' batteries can be disposed of safely. Most batteries contain toxic materials and should not be sent to landfills.

4.9 Client assessment

Control measures need to be tailored to each person in care, as each will have different needs. An initial client assessment means that workers have information on the person's needs, and how best to address moving and handling them.

Assessing a client and the transfer tasks needed is the first step in the care and rehabilitation process. The purpose is to identify the risks, goals and resources needed as part of the risk reduction process. Workers may be faced with unplanned situations that can increase the risks for client and carer. The assessment process balances the risks and needs of the client with the available resources. It is important to begin the assessment as part of the admission and schedule regular updates.

Assess a client's ability to assist during repositioning, transferring and ambulation. Identify tasks that require lifting, lowering, carrying, pulling, pushing and supporting. Where possible, use hoists or moving and handling aids to perform moving and handling tasks.

Critical issues to assess include the client's:

- required level of assistance
- weight-bearing capability
- height, weight and body circumference
- conditions likely to affect transfer or repositioning techniques, including:
    - hip and knee replacements

- paralysis
- amputations
- contractures
- osteoporosis
- respiratory and cardiac conditions
- skin conditions.

As the person's care progresses, it's important to periodically revisit the initial client assessment, and to update it as needed.

4.10 Task assessment

With client assessment as a baseline, the next step in controlling the risk of moving and handling injuries is to assess each moving and handling task before it commences.

There should be a systematic risk assessment before any moving and handling of a client, to identify risks and organise control measures. When a decision has been made that a client should be moved, the carer needs to carry out the specific procedures relating to the client, the carer (or carers), the task and the environment in which the task will take place. These detailed risk assessments are primarily relevant for inpatients or people receiving ongoing care. Carers who have only brief contact with clients (e.g. ambulance and fire service) should use briefer checklists or assessments.

Consultation with other professionals may be needed regarding the client's physical function and strength.

4.11 Bariatric care

In the past 20 years there has been an increase in the number of bariatric admissions to health care facilities. The increasing number of bariatric clients presents a challenge to health care and other service providers to give care that is effective and safe for both the clients and workers.

Bariatric is the science of providing health care for those who are severely obese. Several criteria are used to determine if someone is classified as a bariatric client. Please note that there is not a complete consensus on the criteria for classifying a person as bariatric based on weight or Body Mass Index (BMI). However some examples include those people:

- with a body weight greater than 140 kilograms.
- with a BMI greater than 40 (severely obese), or a BMI greater than 35 (obese) with co-morbidities.
- with restricted mobility, or is immobile, owing to their size in terms of height and girth.
- whose weight exceeds, or appears to exceed, the identified safe working loads (SWLs).

Health risks for bariatric clients

People who have been bariatric for a considerable time face chronic and serious health conditions, many of which should be considered before moving or handling them. Health conditions to take into account include:

- skin excoriation
- rashes or ulcers in the deep tissue folds of the perineum, breast, legs and abdominal areas
- fungal infection
- bodily congestion, including causing the leaking of fluid from pores throughout the body, a state called diaphoresis, which makes the skin even more vulnerable to infections and tearing
- diabetes
- respiratory problems
- added stress to the joints, which may result in osteoarthritis.

Why special planning is needed for bariatric clients

Moving and handling people is a significant hazard for health workers. Caring for a bariatric person is a crucial part of health care, but working with bariatric clients can accentuate the risks for both clients and carers. While lifting any client can lead to musculoskeletal injuries, strains, sprains and excessive spinal

loading for carers, there are substantial risks associated with moving and handling bariatric clients when performing daily tasks.

Given the risk factors, client safety and the safety of workers need special attention when caring for bariatric clients. Bariatric clients may face greater health risks than the general population and have complex needs.

Planning for bariatric clients

The planning process for bariatric clients in order to reduce moving and handling risks should include:

- admission planning
- client assessment
- communication
- room preparation
- mobilisation plan
- equipment needs
- space and facility design considerations
- planning for discharge.

Facility and equipment needs for bariatric clients

Health care and other facilities providing care for bariatric clients need to provide adequate spaces for these clients. Some considerations could include:

- ramps and handrails at entrances
- bariatric wheelchairs
- that the facility's main entrance has sufficient clearance
- adequate door clearance and weight capacity in lifts
- increased door clearances
- storage spaces to accommodate oversized wheelchairs, stretchers, trolleys and beds, as well as mobile hoists.

For client rooms, increase the space for each room by approximately ten square metres above the size of a standard room, and provide for a 1,75m clearance around beds. This additional room space is necessary for specialised equipment such as wheelchairs and mobile hoists, as well as for additional nursing workers required to care for bariatric clients. If ceiling tracking is fitted into areas for bariatric care, ceilings require additional steel reinforcement to be designed into the structure.

In bathrooms, bigger shower stalls should feature heavy-duty hand bars. Other options for showers are multiple handrails, large seats and hand-held showerheads. Large toilet seats are also needed. Toilet fixtures and sinks should be floor mounted, although care should be taken that floor-mounted sinks do not interfere with wheelchairs. Bathrooms should be sized to allow for worker assistance on two sides of clients at the toilets and showers, for cases where both large people will be transferred and large equipment is needed.

Specific issues related to the care of bariatric clients

ASSISTANCE VERSUS MOBILITY AND REHABILITATION

A potential conflict in the moving and handling of bariatric clients concerns the need to use hoists and other moving and handling equipment while also promoting client rehabilitation and mobility. A focus on reducing risks for both workers and client during movement and handling may result in the client becoming dependent on carers and equipment and unable to move on their own initiative. This may lead to the neglect of the client's mobilisation and rehabilitation. There needs to be a balance between developing a bariatric client's mobility and using moving and handling equipment to ensure client and worker safety. Although there is no set formula to achieve a balance, it is important to be aware of these issues.

EMERGENCY SERVICES

Given the rise in the number of obese people in New Zealand, emergency services such as the ambulance and fire services face the likelihood of having to transport bariatric clients. Ambulance and fire services and funeral workers face an increased risk of injuries when moving bariatric clients. They

may have limited access to lifting equipment and there is often limited space within which to move or transfer clients safely. For these and other reasons, it is acknowledged that in the case of an emergency the correct moving and handling procedures and techniques may be difficult to apply, and there may be improvisation. Nevertheless, it is strongly recommended that a thorough risk assessment be conducted whenever possible.

Client moving and handling may be compromised when working in confined areas that make access to the client difficult. Specific factors to include in the risk assessment prior to moving and handling a bariatric client are:

- the weight and size (BMI, seated hip width) of the person
- the size and SWL of equipment
- the use of equipment in restricted spaces.

Another risk to workers is that of crush injuries where hands or limbs become pinned between the client and a hard surface such as a wall or floor. This is a real risk if the client suddenly moves or falls while being moved.

COMMUNITY CARE

Consideration should be given to a bariatric client's discharge from a facility. Poor preparation for discharge can be disastrous for the client and their family. This could result in poor recovery or a worsening of their condition, which could lead to re-hospitalisation.

Topics that need to be assessed and dealt with (changes made, equipment or services provided) before a client's discharge are:

- the home environment access and space, especially if new equipment is to be installed
- what equipment is needed
- ensuring that equipment and furniture used by the client have adequate SWLs
- moving the client up and down ramps in a wheelchair, which may be high risk and need special arrangements
- home support services for the client – home support workers may require specific training before the client's discharge
- communication with other agencies and services – ensure that the appropriate notifications and referrals have been made before discharge, such as to the client's general practitioner, home support agencies and the community nurse.

BARIATRIC PREGNANT WOMEN

Bariatric pregnant women may have specific requirements (e.g. lithotomy, poles, and water births) that require prior planning and additional facilities for birthing suites and services for pregnant women.

4.12 Incident reporting

Having a robust incident reporting process is key to identifying where control measures aren't adequate, and promote a culture of improvement.

Management should use the reporting of accidents, errors and near misses as learning opportunities for both workers and management, and to indicate steps that can be taken to improve on safety performance. It is important to communicate to workers the findings and actions taken following an investigation.

Incident reporting systems generally involve:

- routine reporting and recording of specific events, such as minor accidents, near misses and equipment failures
- incident and injury records containing key information about injury events, including the nature of the injuries, the hazards present in the setting where the injuries occurred, and the tasks being performed at the time of injury
- analysis of reported incidents to pinpoint potential or actual failures in safety systems
- documenting trends in incident data over time.

Incident forms can be used to record specific events, including accidents and other incidents. These forms can be adapted to identify events occurring while moving and handling people. For example, when recording the work activity at the time of the incident, add a specific category (e.g. a box that can be ticked) for any incident that occurred while moving and handling a client. There should also be forms available for early reporting of discomfort and pain occurring during workplace activities.

Note some incident and early report forms include the names of workers. This may be required for some reporting purposes. However, where an incident reporting system is set up, it is usually better to set up a system for anonymous reporting of incidents, and to ensure that incidents from incident report forms are collected and entered into a database without any names. Anonymous reporting leads to more frequent reporting of incidents because workers do not feel they will be blamed for specific events.

You must notify WorkSafe when certain work-related events occur. More information on notifiable events can be found on the WorkSafe website.

4.13 Emergency plans

No matter how robust your systems and procedures are, everything changes in an emergency situation. Therefore it's vital to include an emergency plan in your HSMS.

In the context of moving and handling, it's vital that the emergency plan takes into account the mobility restrictions of clients. Hospitals and emergency services need to establish protocols and specific arrangements for moving and transporting people in an emergency. Those protocols should be covered in training, and communicated to all workers.

Emergency plans must be maintained, and should be tested at least yearly.

5 Risk Management - Check

IN THIS SECTION:

Ongoing review will show whether your moving and handling programme is working.

The final step in the process of managing exposure to the risks associated with people moving and handling is to monitor and audit the effectiveness of measures. This is necessary to make sure the systems are working as intended.

Monitoring assesses the extent to which organisational systems and control measures are working and ensures they are implemented systematically throughout the workplace. It is important to consult a range of workers, particularly those who have worked with the control measures.

A specific part of programme review is to conduct audits of risk assessment procedures. An audit refers to a performance review intended to ensure that what should be done is being done. Where there are gaps, an audit should provide information that enables improvements to be made.

5.1 Sustaining an effective moving and handling programme

A common experience following the setting up of new initiatives in the workplace is that they become less effective over time as workers change, and systems revert to the previous styles of operation. After the successful launch and implementation of an injury prevention programme, management may reduce funding and resources, and the programme may become less effective.

For the successful sustainability of moving and handling programmes in New Zealand, some key themes are likely to be:

- continuing development and updating of moving and handling programmes
- having a local champion or advocate for moving and handling in every facility involved in moving and handling people
- establishing strategic links with key groups and organisations, including regional linkages for moving and handling coordinators
- integrating moving and handling with other systems within an organisation, including other health and safety programmes, training programmes, audits, and performance targets
- ensuring programme continuity during turnover in management and workers.

5.2 Developing monitoring systems

Monitoring is an ongoing process that involves collecting, recording, summarising and reporting information related to the implementation of a programme and its outcomes. Monitoring should be a routine part of effective management systems. It:

- enables a better allocation of resources
- enables better client and patient safety
- supports worker safety
- helps to avoid incidents and events that detract from core operations
- assists strategic planning for future developments and increased efficiencies in services and programmes.

When a new moving and handling programme is implemented, or following significant changes to an existing programme, monitoring is essential to get a picture of how well the programme is working, and whether modifications are needed to improve the programme. For some organisations, it will be

appropriate to include monitoring into broader organisational monitoring systems as part of health and safety operations.

For others, it will be easier to set up specific monitoring systems for moving and handling, and appoint a coordinator or manager to operate the monitoring system. Whichever patterns suits, setting up a monitoring system is essential to keep track of a programme and make sure it is working properly. A monitoring system will also provide information for more comprehensive reviews and evaluations of the programme later on.

Examples of information that might be used for monitoring include:

- existing reporting systems, including statutory reporting
- number of workers attending moving and handling training
- proportion of total workers who have attended training
- hazards and other items discussed at health and safety meetings (meeting minutes)
- first aid records for the unit or organisation
- incident reporting
- ACC claim data
- absentee records
- time off for medical visits
- staff turnover rates
- employee complaints (e.g. workload, equipment and software problems, pain and discomfort)
- productivity measures
- workplace assessments and hazard checklists
- workplace walkthrough audits to observe working practices
- surveys of moving and handling workers via self-report questionnaires
- absentee rates resulting from moving and handling
- time off for medical visits as a result of moving and handling work strain
- interviews with workers involved in moving and handling people
- worker morale and satisfaction measures (e.g. suggestion boxes, group meetings, surveys).

5.3 Setting up a monitoring system

The first step in setting up a monitoring system is to identify moving and handling information that is already collected. This information may be held in several locations or databases within an organisation. Develop a list of these information sources and a plan for how the sections relevant to moving and handling could be integrated into a single data set.

Once the relevant information has been compiled, find out whether its usefulness for moving and handling could be improved by making small changes to the way it is being collected. For example, if incidents or minor injuries are recorded, could additional information about activities taking place be collected so that it is clear whether incidents or injuries occur during moving and handling activities?

The next step in setting up a monitoring system is to plan what additional information needs to be collected to maintain an overview of how well the moving and handling programme is working. Two main types of moving and handling data that should be collected are incidents and audits. Where possible, arrange to combine any new data collection with existing data collection systems to minimise the costs of collecting additional data.

5.4 Evaluation of moving and handling programmes

Monitoring a moving and handling programme is a useful precursor to developing an evaluation of programme outcomes and the extent to which the programme is producing the intended effects. For moving and handling programmes, the intended effects are likely to be reduced discomfort and pain among workers, fewer injuries and fewer days off work by workers.

You should typically use monitoring information as a starting point and extend the information to build a comprehensive view about how well the programme is being implemented. If there is little or no monitoring or audit information available, a process evaluation will need considerable additional time and resources to gather the information required.

5.5 Developing evaluation indicators

A primary purpose of an outcome evaluation is to determine the extent to which the negative outcomes, such as injuries, ACC claims and staff absenteeism, have decreased in the time since the moving and handling programme was implemented. Data collected for the outcome indicators require collation, statistical analysis and reporting so that any trends in the outcome data are clear. The use of trends for 12-month periods has been suggested above. However, trends can also be aggregated and reported for other time intervals.

One common problem is that existing monitoring data are not able to be separated by outcomes related to moving and handling, and outcomes related to other activities. For example, worker sick leave and absenteeism records may not include the reasons leave was taken.

Specific measures that could be used as outcome indicators in an evaluation include:

- number of injury events that resulted in days away from work
- number of days away from work due to a work-related injury
- number of days on restricted work or transfer to another role when a work-related injury keeps an employee from performing their routine job functions
- incidents requiring medical treatment beyond first aid
- number of days of sick leave taken by employees in a work group or unit.

It will be important to ensure that any data collected are labelled or tagged by the task being performed at the time of injury, so that injury events can be sorted or stratified as 'moving and handling' injuries or 'other' type of injury.

5.6 Audits

In contrast to ongoing monitoring of systems and process throughout their use, audits are discreet thorough reviews of all or part of the programme. This could be scheduled yearly or every two to three years. Audits usually use audit checklists that record observations of specific items or activities to determine if they comply with the patterns expected in a programme.

Whoever carries out an audit should plan to communicate the audit findings to the unit managers with the intention of improving worker performance and safety, the care and safety of clients, and the work environment overall. It is important to consult a range of workers, particularly those who have worked with audits. Workers should also be informed of the findings in a manner that does not spotlight individuals, especially if there are issues of non-compliance.

The outcomes from audits enable managers to assess how well moving and handling programmes are working. They also gauge the level of compliance by workers with expected practices for moving and handling. Audits should also identify potential areas of concern, and validate and review information or data for completeness and accuracy. Audit information must be documented and communicated back to the manager or supervisor of that area, so safety for clients and workers can be maintained, and to address specific issues or potential issues identified.

Types of audit

These include routine or scheduled audits, spot or random audits, and audits in response to adverse outcomes. Audit information is collected using one or more procedures such as:

- observing workers at work
- interviewing workers
- checking client profiles or records (e.g. risk assessments)
- interviewing clients
- walkthrough audits to check equipment.

'Routine or scheduled audits' are planned at regular intervals to obtain estimates of compliance levels with moving and handling practices. The frequency of scheduled audits depends on the availability of resources, and whether audit information is needed to assist in decision-making at specific times during the year.

'Spot and random audits' are unscheduled audits, usually initiated by health and safety managers or moving and handling coordinators, and may be used to target areas with high accident or incident rates. Spot audits are typically performed to ensure compliance in areas where the need for compliance is high. Ideally spot audits should be conducted regularly during the year and, when the need arises, information from spot audits can be used by managers to decide whether immediate action is needed to avert any potential problems.

Spot audits may involve observing workers conducting moving and handling tasks, such as risk assessments, transfer techniques, and using equipment such as hoists and slide sheets. Client records such as client profiles can be checked against their mobility levels to determine whether risk assessments are accurate.

'Adverse outcomes audits' are carried out following specific injuries or incidents to determine whether there are particular patterns of client transfers related to incidents, staff absenteeism or sick leave. These audits are generally conducted by senior managers. It is important to look for underlying reasons for higher rates of injury and absenteeism, and areas where serious incidents have taken place, even if they were isolated cases. It may also be useful to focus on areas that have recorded falling rates of injury or absenteeism, because there may be lessons to be learnt from these trends.

'Comprehensive audits' may be carried out as part of major evaluations of moving and handling programmes in multiple facilities and workplaces. Often such audits are organised by regional or national authorities to provide overviews of moving and handling programmes in health and residential care facilities. Such audits have been used in Australia and in other countries that have national or federal agencies responsible for health and safety in workplaces.

Who carries out audits?

Routine audits are usually conducted by unit managers, supervisors or moving and handling coordinators. Occupational health and safety managers or representatives usually organise audits, and have overall responsibility for collating and analysing audit records, reporting audit outcomes and determining overall compliance with organisations' moving and handling policies.

Unit managers or supervisors can delegate spot audits to nurses, rotating them during the year so that all their nurses get to participate in audits. Nurses in New Zealand are required to carry out audits as part of their annual professional development. It is useful for nurses to audit different wards or units from their own work areas. Community and district nurses should also be included.

Community carers also need to be audited. As there may be resourcing issues with organisations and people providing services to those living in the community, home carers need to have access to people suitably qualified to carry out audits if expertise is not already available.

Areas to audit

RISK MANAGEMENT

Risk identification varies by setting and may be different in hospital wards, acute care, aged care, nursing homes and home care. When conducting a risk assessment audit, the following information sources can be considered:

- What information is kept about the profile of clients?
- What forms or checklists are used for risk assessment?
- What central records are kept relating to client profiles?
- Is the client mobility assessment card visible near the client's bed?
- What movement risk assessments are conducted before moving people?

PRACTICAL TECHNIQUES

Gathering information for technique audits is generally more complex and time consuming than for other components of moving and handling programmes. Relevant information can be gathered in several ways:

- By the observation of ongoing moving and handling tasks in a work unit
- Through asking workers to carry out specific transfer tasks with clients or other people
- Through surveys where workers report on how they carry out moving and handling tasks.

Where non-compliance has been reported for specific moving and handling techniques (such as the use of hoists, slide sheets and other equipment), an auditor may wish to use informal interviews with workers to find out reasons for the non-compliance.

Information from informal interviews can be used directly to plan specific training for the workers, and to find out if any changes are needed to remove barriers to compliance. Auditors should check if the necessary equipment is readily accessible and available to workers.

Audits of techniques should be carried out by workers or managers with relevant training and experience in moving and handling people.

TRAINING

Audits of training cover the extent to which workers involved in moving and handling people have adequate training. Training audits should be one of the easier types of audits to conduct, providing suitable records of training have been kept. Training records include:

- Lists of workers who have attended training, held by trainers
- Lists of workers from specific wards or units who have attended training, held by managers
- Lists of workers who did not attend their scheduled training sessions
- Training programme documents, such as the training schedule and topics covered in training
- Assessments of trainee competencies made by trainers
- Participant evaluations of training workshops held by trainers.

Two specific areas of training that should be monitored and audited by unit or ward managers are induction training for newly employed workers, and annual updates or refresher training for existing workers. Unit managers need to monitor the training schedules for workers in their groups and arrange for workers to be released for training.

EQUIPMENT

Generally, the managers of units responsible for storing and using equipment will be responsible for auditing equipment. Shared or pool equipment may need specific arrangements for auditing. Equipment audits should cover the availability of equipment within the unit or ward that is suitable for the client profile of the unit. Important features for an equipment audit include:

- Availability: Are there sufficient items of each type of equipment available where needed?
- Equipment storage: Can the equipment be stored in a suitable place when not in use?
- Ease of access: Are equipment items stored in places that make it easy for workers to access them?
- Proper labelling: Are fitness certificates and SWLs clearly labelled on hoists and other equipment?
- Maintenance and servicing: Do visual checks of equipment identify any problems or potential problems (e.g. wobbly wheels on wheelchairs, tears in slings, infection control issues)?
- Battery charging: Are there suitable charging facilities for battery-operated equipment?

FACILITY

Facility audits cover building design, workspaces and furniture related to moving and handling and should take place at least once a year. A facility audit should also take place after an incident or near miss, and before a facility or area is to be upgraded or renovated. Auditors should pick specific areas to do walkthrough observations with a list of items to check.

Walkthrough audits can be effective as a straightforward way of checking on storage, facility layout and some risk assessment details. A walkthrough audit can quickly pinpoint problems related to storage space, lack of access to equipment and poor facility design.

BARIATRIC

Auditors of facilities that have bariatric clients may wish to gather specific information regarding the extent to which planning for moving and handling bariatric clients is catered for.

The following types of information will be relevant to a bariatric audit:

- Information on client admissions in the previous five years, documenting the number of bariatric clients being admitted each year and the wards or units where they have been receiving clinical or other care
- A list of bariatric equipment available

- An audit of moving and handling equipment to confirm which equipment items are suitable for use with bariatric clients
- Location of and access to bariatric equipment
- Specific wards or units within a facility designed for bariatric client care
- Information provided to workers about the moving and handling of bariatric clients
- Extent to which workers who move and handle bariatric clients have been given appropriate training
- A reporting system for incidents and accidents where bariatric clients were involved.

6 Risk Management - Act

IN THIS SECTION:

Continuous improvement keeps moving and handling programmes effective and current.

6.1 Continuous improvement

It's important to act immediately to improve control measures and processes whenever problems are identified, or when the opportunity to upgrade is presented. Good ongoing monitoring and scheduled whole-of-programme audits will help with this. Revise your programme and control measures whenever monitoring indicates an opportunity to do so.

A commitment to continuous improvement will have knock-on positive effects on your workplace culture. Where workers can see that management is invested in their health and safety, communication and practice will often improve.

6.2 Learning from incidents

Following analyses of incidents, information concerning the causes of near misses and adverse events can be used to plan changes that reduce the risk of accidents and improve safety. Information on the frequency of specific types of failure and near misses and current safety performance can be communicated to workers to increase awareness of current operational risks and remedial measures. The training coordinator for moving and handling should be involved in incident reporting analyses so that alerts and incidents can be included in training programmes provided for workers.

6.3 Learning from people

Often the best wat to test the effectiveness of your moving and handling programme is to speak to the people directly involved in it. Workers performing moving and handling tasks are best equipped to report on whether the programme is working, and how it could be improved. Regular feedback should be sought, either in person or through consultation mechanisms like surveys.

Similarly, clients and patients could provide valuable insight as to whether their needs were met while they were being cared for. Exit interviews when a patient is discharged, or carer reviews for those under at-home or residential care should be a part of the monitoring processes, and opportunities for improvement taken.

Appendices

IN THIS SECTION:

Appendix 1: Key health and safety terms

You can use these terms and explanations to help build worker understanding. For more information about these and other terms, visit WorkSafe's website: www.worksafe.govt.nz

TERM	EXPLANATION
Accident	An event that (a) causes any person to be harmed; or (b) in different circumstances, might have caused any person to be harmed.
Business or undertaking	The usual meanings are: - business: an activity carried out with the intention of making a profit or gain - undertaking: an activity that is non-commercial in nature (eg certain activities of a local authority).
Competent person	A person who is appropriately trained, skilled, knowledgeable and/or experienced to safely complete a task.
Contractor	Someone a person pays to do a job but who is not employed by that person.
Control measure	A way of eliminating or minimising risks to health and safety.
Designated agency	A government agency other than WorkSafe designated to carry out certain health and safety functions.
Duty holder	A person who has a duty under HSWA (see explanation below). There are four types of duty holders – PCBUs (see explanation below), officers, workers and other persons at workplaces.
Eliminate	Remove a hazard.
Enforcement tools	Prosecutions or infringement notices used to impose a penalty. Inspectors also use prohibition notices, improvement notices and written warnings to require improved safety standards.
Engagement	A PCBU (see explanation below) has to engage with its workers on health and safety matters. A PCBU engages by: - sharing information about health and safety matters so that workers are well-informed, know what is going on and can have a real say in decision-making - giving workers reasonable opportunities to have a say about health and safety matters - listening to and considering what workers have to say - giving workers opportunities to contribute to the decision-making process relating to a health and safety matter - considering workers' views when decisions are being made - updating workers about what decisions have been made - involving any HSRs. If workers are represented by an HSR, engagement must involve that representative.
Good faith	Acting in good faith is an important legal concept. Employers, employees and unions have a duty of good faith. This includes the need to be active and constructive in maintaining an employment relationship that is honest and communicative. Treating each other with mutual respect reduces the risk of conflict and problems.
Guarding	Using something (such as a screen) to stop someone being harmed by a machine.
Hazard	An actual or potential cause of harm, including an object, activity or event. Includes a person's behaviour where that behaviour has the potential to cause death, injury, or illness to a person (whether or not that behaviour results from physical or mental fatigue, drugs, alcohol, traumatic shock, or another temporary condition that affects a person's behaviour).
Health and Safety at Work Act 2015 (HSWA)	HSWA is the key work health and safety law in New Zealand. All work and workplaces are covered by HSWA unless specifically excluded.
Health and Safety at Work	The Health and Safety at Work (Worker Engagement, Participation and

TERM	EXPLANATION
(Worker Engagement, Participation and Representation) Regulations 2016 (the Regulations)	Representation) Regulations 2016 outline additional requirements for businesses or undertakings with Health and Safety Committees (HSCs) and HSRs.
Health and safety committee (HSC)	An HSC supports the ongoing improvement of health and safety at work. An HSC enables PCBU representatives, workers and other HSC members to meet regularly and work co-operatively to ensure workers' health and safety.
Health and safety representative (HSR)	HSRs are workers elected by members of their work group to represent them in health and safety matters.
Health monitoring	Monitoring workers' health to see if their work is harming their health and to assess ongoing effects.
Injury	Damage or hurt to someone.
Investigation	A process of gathering information about an accident or incident to find out why the accident or incident happened and how to stop it from happening again.
Isolate	Separate a hazard that cannot be eliminated. For example, removing a noisy machine to a place where no-one can hear it.
Job safety analysis; safe work method statement; safe operating procedures	Step-by-step descriptions of how to do a task, job or activity safely.
Minimise	Reduce the risk of a hazard occurring when workers are exposed to it, if eliminating or isolating it is not possible. For example, wearing PPE reduces the risk of exposure to blood borne viruses.
Near miss	An incident which did not result in injury, illness or damage, but potentially could have.
Notifiable event	A notifiable event is when any of the following occurs as a result of work: - a death - notifiable illness or injury (see below) - a notifiable incident (see below). Under the Health and Safety at Work Act 2015 (HSWA) you must notify WorkSafe when a notifiable event occurs. See HSWA sections 23 and 24 for more information.
Notifiable injury or illness	An injury or illness that requires the person to have immediate treatment (other than first aid). For example, a serious head injury, a serious burn, an injury or illness that requires, or would usually require, the person to be admitted to a hospital for immediate treatment or to have medical treatment within 48 hours of exposure to a substance.
Notifiable incident	A notifiable incident means that someone has been exposed to a serious or immediate risk to their health and safety because of an unplanned or uncontrolled work incident. For example, exposure to a leaked substance, an electric shock, or the collapse/partial collapse of a structure.
Officer	An officer is a person who has the ability to significantly influence the management of a PCBU. This includes, for example, company directors and chief executives. Officers must exercise due diligence to ensure the PCBU meets its health and safety obligations. See WorkSafe's Special Guide: Introduction to the Health and Safety at Work Act 2015 for a detailed explanation of an officer's role and duties.
Other person at workplace	Other persons include workplace visitors and casual volunteers (who are not volunteer workers). Other persons at workplaces have their own health and safety duties to take reasonable care to keep themselves safe and to not harm others at a

TERM	EXPLANATION
	workplace.
Overlapping PCBU duties	When more than one PCBU has health and safety duties in relation to the same matter.
PCBU	PCBU stands for 'Person Conducting a Business or Undertaking'. In most cases a PCBU will be a business entity, such as a company. However, an individual carrying out business as a sole trader or self-employed person is also a PCBU.
Personal protective equipment (PPE)	Anything used or worn by a person (including clothing) to minimise risks to the person's health and safety; this includes air-supplied respiratory equipment.
Plant	Includes: - any machinery, vehicle, vessel, aircraft, equipment (including personal protective equipment), appliance, container, implement, or tool; and - any component of any of those things, and - anything fitted or connected to any of those things.
Primary duty of care:	A PCBU must ensure, so far as is reasonably practicable, the health and safety of workers, and that other persons are not put at risk by its work. See WorkSafe's special guide Introduction to the Health and Safety Act 2015 for further details.
Reasonably practicable	'Reasonably practicable' means what is or was reasonably able to be done to ensure health and safety taking into account and weighing up relevant matters including: - the likelihood of the risk concerned occurring or workers being exposed to the hazard - the degree of harm that might result - what the person concerned knows, or ought reasonably to know, about: - the hazard or risk - ways of eliminating or minimising the risk - the availability and suitability of ways to eliminate or minimise the risk - after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk. Control measures can only not be implemented where cost is grossly disproportionate. See WorkSafe's Reasonably Practicable fact sheet www.worksafe.govt.nz/worksafe/information-guidance/all-guidance-items/hswa-fact-sheets/reasonably-practicable/reasonably-practicable.pdf
Regulator	WorkSafe New Zealand, or the relevant designated agency.
Risk	Risks arise from people being exposed to a hazard (a source of harm).
Safety data sheet	Information about how a product could harm people and how to safely store, use and handle that product.
Serious harm	An injury or an illness created by work-related activity that causes permanent or temporary severe loss of bodily function, including: - amputation - burns requiring specialist attention - loss of consciousness – from lack of oxygen, or from absorbing, inhaling or eating/drinking a substance - damage to hearing or eyesight - poisoning - respiratory disease or cancer - death.

TERM	EXPLANATION
	Any injury or illness that causes a person to be in hospital for 48 hours or more is also considered 'serious harm'.
Structure	Anything that is constructed, whether fixed, moveable, temporary, or permanent; includes: - buildings, masts, towers, frameworks, pipelines, quarries, bridges, and underground works (including shafts or tunnels) - any component of a structure, and - part of a structure.
Toolbox talk	A short informal group meeting or discussion about a specific health or safety issue or topic. It's a good way to provide information to workers and to start health and safety conversations.
Union	An organisation that supports its membership by advocating on their behalf. The Employment Relations Act 2000 gives employees the freedom to join unions and bargain collectively without discrimination. Workers can choose whether or not to join a union. A union is entitled to represent members' employment interests, including health and safety matters.

Appendix 2: Example of a risk assessment system: The LITEN-UP approach

This appendix describes an example of a specific system or approach for client risk assessment, known as the 'LITEN-UP' approach. LITEN-UP has been used in some facilities in New Zealand since 2003. It is suitable for use where a health care provider wishes to use a specific client risk assessment system.

The purpose of LITEN-UP is to ensure that client handling is safe for both carers and clients. Risk can be assessed using the LITE principles outlined below in conjunction with suitable assessments of client dependency. The LITE principles, combined with client profile information, provide the information needed to make decisions about safe client handling.

THE LITE PRINCIPLES

LITE is a way to remember the key risk factors that should be considered when preparing a safe client handling strategy. The LITE principles are described in the table below.

Load	Load refers to the client characteristics that can affect the handling risk, such as age, gender, diagnosis, comprehension of oral language, dependency, neurological status, size, weight, ability, extent of client cooperation, client disabilities, culture and fall risk.
Individual	Individual refers to carers who are moving the client. It includes the carers' knowledge, training, general health and fatigue that can affect one's ability to do the job.
Task	Task refers to the nature of the moving and handling task to be done, how and when. Different tasks have different challenges. Each moving and handling task needs assessment and a specific strategy.
Environment	Environment means the working environment, and covers factors such as space, equipment availability, staffing levels, work culture and resources, which all impact on how the task can be done.

In the LITEN-UP approach, risk factors are not necessarily assessed in the order shown, and not all risk factors need to be completely reassessed in every situation. In most wards or units the 'Environment' and 'Individual' factors can be assessed by workers (or other people who are trained in risk assessment) and applied to most client handling situations. Generally, carers must consider all four LITE principles before selecting a handling technique and organising any equipment required. Check the information in the client profile, related to risk assessment, prior to moving the client to ensure appropriate handling procedures are used.

Appendix 3: Example of information included in a client profile

Organisation		
Last review date		Next review date
Ward or unit	Profile completed by	Date
Client details		
Name		Preferred name
Height	Weight	Date of birth
Relevant medical conditions		
Client mobility status: Independent_____ Supervise_____ Assist_____ Hoist_____		
Note any specific conditions that affect moving the client		
Falling risk	Skin at risk	Medical equipment
In pain	Incontinence	Surgery risks
Impaired movement	Vision problems	Footwear needs
Loss of sensation	Hearing problems	Compliance issues
Other communication issues	Other issues (e.g. cognitive state). Describe here	
Handling plan required? No_____ Yes_____ (complete details below)		
Sitting and standing		
Walking		
Moving in bed		

**For example client capabilities, clinical reasoning*

Appendix 4: Example of a pre-movement risk assessment form

Client assessment			Carer (staff) capability		
Large or very large (bariatric) client	No	Yes	Staff not adequately trained for or confident about planned move	No	Yes
Client unable to assist	No	Yes	Continual handling of clients for more than 30 minutes on shift	No	Yes
Client physical constraints (e.g. medical equipment in place, spinal or other injury)	No	Yes	Insufficient staff numbers for move	No	Yes
Client may be resistive, unpredictable or uncooperative	No	Yes			
Task assessment			Environmental assessment		
High-risk move*	No	Yes	Limited space or access to working areas	No	Yes
Move requires awkward postures, bending, twisting	No	Yes	Slippery floors, uneven surfaces	No	Yes
Move requires high force, holding, restraining	No	Yes	Inappropriate furniture, such as wind-up beds, no grab rails in bathrooms	No	Yes
Move requires reaching away from body or over shoulder height	No	Yes	Equipment not easily moveable	No	Yes
Total column score ('Yes' selected)			Total column score ('Yes' selected)		
*High-risk moves include: repositioning in bed, repositioning in a chair, transfer between bed and chair, transfer between chair and toilet, lateral transfer bed to stretcher.			Total risk score = (out of 15) Scores over 6 indicate need to re-plan move to control or reduce risk		

Appendix 5: Example of an equipment register entry

Equipment type	e.g. ceiling hoist, mobile hoist, wheelchair
Brand or model	Manufacturer's name and model details
Supplier	Name and contact details of company supplying equipment
Acquisition date	Date purchased or leased (use delivery date to facility)
Serial number	Manufacturer's serial number (if relevant)
Identification number	A unique number supplied by owning organisation (if relevant)
Equipment description	Details of equipment item and any accessories so they can be easily identified (e.g. photo, diagram or written description) and accompanying accessories (e.g. handheld remote control, spare battery)
SWL	Safe working load in kilograms (if relevant)
Warranty	Period of supplier warranty and warranty expiry date (if relevant)
Expected working life	Expected working life of equipment before it needs replacement
Post-purchase check	Person responsible for commissioning equipment, checking it prior to use and ensuring any required labels or stickers (such as SWLs and expiry dates) are present and clearly visible on the equipment
Location	Usual location in organisation and any special storage details (e.g. access to battery charging, slings located in same area as hoists)
Routine servicing	Details of routine servicing needed (e.g. battery charging for hoists, laundry service for slide sheets and slings)
Responsibility for equipment	Name of manager or position responsible for equipment and its allocation to users
Available for loan	Details about whether equipment can be used in other units or loaned to external users
Service schedule	Service period (e.g. six months, 12 months)
Specific service details	Replacement date for specific parts (e.g. batteries) or expiry date after which the equipment cannot be used without a service check
Service provider	Name of person or unit responsible for servicing or name of provider (if externally serviced)
Date of service	Date of most recent servicing
Servicing comments	Specific comments made about the equipment by person doing servicing
Specific service requests	Note staff names, dates and types of request for specific requests for servicing or assessments of equipment
Incidents involving the equipment	Details of any incidents (e.g. accidents, near misses) involving equipment, details of equipment failures or design faults and details of any follow-up action needed or taken
General comments	Comments from users related to the design and usefulness of the equipment or the specific model – this information may be useful for future purchasing decisions
Equipment disposal policy	Any specific equipment disposal requirements (e.g. disposable slings, slide sheets)
Equipment disposed of	Date, where disposed to and people informed about disposal (if needed)
Equipment replacement	Details about new equipment to replace equipment disposed of

Appendix 6: Information for an incident/early reporting form

Identifying details	Names, positions and unit locations of person injured/affected, a witness (if relevant) and person filling in form
Incident event details	Date, time and location of incident
Description of incident	An account of the incident from perspective of the person affected, a witness or other person
Type of incident	A set of categories that provide summary classifications of the incident, such as discomfort, pain, near miss incident, first aid incident, medical treatment required, time off required. More than one item may be ticked
Activity at time of incident	Type of work or other activity in which person affected was engaged when the incident occurred. If desired, specific tick boxes can be added to assist classification, such as 'moving and handling client'
Details of discomfort, pain or injury incidents	Rating scales for severity of discomfort or pain, duration, part of body affected (e.g. severe pain, moderate pain, mild pain, discomfort)
Cause of incident	A description of the factors that are likely to have caused the incident. If the cause is not clear, state 'cause unclear'
Follow-up required	Comment from person filling in form (or a supervisor) as to whether any further investigation or follow-up action is required in relation to the incident
Referral to health and safety	Confirmation that a copy of the completed form is being sent to the occupational health and safety section and other people if relevant
Sign-off	Signature of person filling in form and date of completion of form

**Note: The suggested fields in this table are commonly included in incident report forms. Each organisation should develop its own form to suit the organisational requirements.*

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ISBN: 978-0-478-42589-5 (online)

Published: July 2017 Current until: 2019

PO Box 165, Wellington 6140, New Zealand

www.worksafe.govt.nz

WSNZ_1218_JULY 2017