

TLID0020

Shift Materials Safely Using Manual

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course information that matches the PowerPoint presentation.
- Review questions.
- Practical assessment instructions for learners.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.
3. Set the reading and test time limits that are highlighted in pink at the end of the document.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.



LEARNER GUIDE

TLID0020 Shift Materials Safely Using Manual Handling Methods

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

- Course Information.
- Review Questions.
- Practical Assessment overview and Instructions.

Table of Contents

1.1 Introduction	4
1.2 Working Safely	4
1.2.1 Health and Safety Rules	4
1.2.2 Duty of Care	5
1.2.3 Work Instructions	5
1.2.4 Check Site Plans	6
Review Questions	6
1.3 Hazard Identification and Control	8
1.3.1 Hazard Identification	8
1.3.2 Assessing Risks	9
1.3.2.1 Risks Related to Manual Lifting and Handling	10
1.3.3 Control Risks	10
1.3.3.1 Manual Lifting and Handling	11
1.3.3.2 Dangerous or Hazardous Substances	11
1.3.3.3 Goods with Loose or Liquid Contents	12
1.3.3.4 Personal Protective Equipment	13
Review Questions	13
1.4 Prepare for Load Relocation	16
1.4.1 Plan Relocation with Personnel	17
1.4.2 Determine the Relocation Requirements	17
1.4.2.1 Products to be Relocated	18
1.4.2.2 Location for Storage	18
1.4.2.3 Relocation Route	19
1.4.3 Assess Lift Factors	20
1.4.3.1 Effect of Relocation on Load Base	20
1.4.3.2 Load Points of Balance	20
1.4.3.3 Required Clearances	21
1.4.3.4 Size to Weight Ratio	21
1.4.4 Method of Relocation	21
1.4.4.1 Confirm Relocation Method	22
Review Questions	22
2.1 Relocate a Load	27
2.1.1 Safe Relocation of the Load	27
2.1.2 Posture and Handling Techniques	28
2.1.3 Coordinate Team Lifting Tasks	28
2.1.4 Work Method Statements	29
2.1.5 Modify Activities	29
Review Questions	29
2.2 Set Down Relocated Goods	31
2.2.1 Lowering the Load	32
2.2.2 Check the Relocation	32
Review Questions	32
Practical Assessment Instructions	34
Conditions of Assessment	34
Protective Personal Equipment (PPE) Requirements	34
Grounds for stopping the assessment	34
Achieving a Satisfactory Outcome	34
Practical Assessments	35

1.1 Introduction

This unit is based on the national unit of competency **TLID0020 Shift Materials Safely Using Manual Handling Methods**.

You will learn how to:

- ◆ Assess the risks associated with relocating a load.
- ◆ Plan the load relocation.
- ◆ Relocate the load.



1.2 Working Safely



Every workplace should have Work Health & Safety (WHS) policies and procedures to create a safe work environment.

You must follow all safety rules and instructions when performing any work. If you are unsure what to do, ask your boss or supervisor. They will tell you what you need to do and how to do it safely.

Before starting your work, ensure you have access to all workplace policies, procedures and documentation for the job. This will help you do your work safely and make sure all work is compliant.

1.2.1 Health and Safety Rules

Every workplace has to follow laws and rules to keep everyone safe. There are 4 main types:

Type of Law/Rule	Explanation
Acts	These are laws that you have to follow.
Regulations	These explain what the law means.
Codes of Practice	These are instructions on how to follow the law, based on industry standards.
Australian Standards	These tell you what the minimum requirement is for a job, product or hazard.

Some states use OHS laws, and other states use WHS laws. They both talk about the same thing, but use different words or names for people. If you have any questions about safety rules you should talk to your boss or supervisor.

You should refer to the Safe Work Australia Hazardous Manual Tasks Code of Practice 2020 when shifting materials using manual handling methods.

1.2.2 Duty of Care

Work health and safety (WHS) laws state that all companies and workers need to keep themselves and other people safe while they work. This is called a duty of care.

The WHS Regulations impose specific obligations in regards to manual tasks.

Employers must consider all matters that may contribute to an injury when creating control measures for risks relating to manual tasks, including:

- ◆ Posture, movements, forces and vibrations.
- ◆ Duration and frequency of tasks.
- ◆ Workplace environmental conditions.
- ◆ The design of the work area.
- ◆ The layout of the workplace.
- ◆ The systems of work used.
- ◆ The nature, size, weight or number of things involved in the tasks.



1.2.3 Work Instructions

Read and confirm your work instructions before beginning the task. Make sure you have everything about the job written down before you start, including what you will be doing, how you will be doing it and what equipment you will be using.



Each workplace communicates their requirements and procedures differently, they could be communicated to you through:

- ◆ On-site Meetings – Task timelines, place and purposes, task discussions, procedural decisions and discussions.
- ◆ Written Instructions – Plans, reports, maps, specifications, drawings, sketches.
- ◆ Verbal Instructions – On-site meetings, toolbox talks, safety briefings, team meetings, two-way radios, mobile phones.

If you don't know where to get your instructions or can't understand them, you can ask your boss or supervisor. They will tell you where to find your work instructions and explain their meaning.

Work instructions help ensure that all work is done safely, without damaging equipment or putting people in unsafe situations. They also help to make sure that work is done in the correct order and doesn't interrupt or get in the way of other work that is happening on the site.

Your work instructions will tell you the safest way to do the job and the equipment you will need. Confirming your work instructions with your boss or supervisor is a good idea to ensure you are clear about what you need to do.



1.2.4 Check Site Plans

Survey the work area to confirm the route of travel is safe for all personnel, including checking for any obstacles in the area. This will ensure the movement of the load is as safe and efficient as possible.

Typically, the site's layout details will be set out in the project specifications, plans and drawings.

You will need to check the work area to ensure that it matches the project specifications, plans and drawings. Sometimes conditions may have changed between when the plans and drawings were put together and when work begins. If the plans do not match the site, you will need to speak to your supervisor.



Survey the work area in consultation with other personnel on site to ensure that everyone knows what is happening, when and why.

Review Questions

1.	What are the four (4) main types of health and safety rules?	<input type="checkbox"/>
1.		
2.		
3.		
4.		

2.

What are three (3) manual handling factors an employer must consider to maintain a safe working environment?



1.

2.

3.

3.

What are three (3) ways your work instructions may be communicated to you?



1.

2.

3.

4.

Why should you confirm the route of travel is safe for all personnel before beginning the task?



1.3 Hazard Identification and Control

Before you start work, you need to check for any hazards or dangers in the area. If you find a hazard or danger you need to do something to control it. This will help to make the workplace safer.



1.3.1 Hazard Identification

The WHS regulations define a hazardous manual task as one that requires a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing involving one or more of the following:

- Repetitive or sustained force.
- High or sudden force.
- Repetitive movement.
- Sustained or awkward posture.
- Exposure to vibration.

When identifying manual tasks that create a hazard you should consider tasks that:

- ◆ Are difficult to do.
- ◆ Are very tiring.
- ◆ Are awkward or dangerous.
- ◆ Cause discomfort.

These are all signs that the task may cause injury to yourself or another worker.

The hazards that you identify will relate to:

- ◆ The products, goods or materials being moved – chemicals, dangerous or hazardous substances, weights of items.
- ◆ The workplace environment and personnel – site layout and locations and movement of personnel.
- ◆ The processes used to relocate products, goods or materials.



1.3.2 Assessing Risks

After you have found hazards or dangers you need to work out how bad they are. This is done by thinking about two factors:

Likelihood

What is the chance that the risk will hurt someone or cause damage?

Consequence

If it does happen, how bad will the injury or damage be?

You will need to identify all potential sources of risk by considering the following:

- ◆ Posture and movement associated with the task including those associated with:
 - ◇ Neck and head.
 - ◇ Arms and hands.
 - ◇ Legs.
 - ◇ Very fast movements.
- ◆ Duration of the task including:
 - ◇ More than 2 hours over a shift.
 - ◇ Continually for more than 30 minutes.
- ◆ Forces associated with the task including:
 - ◇ High force.
 - ◇ Sudden force.
- ◆ Environmental factors that cause vibration including:
 - ◇ Driving.
 - ◇ Hand power tools.
 - ◇ Machines or tools with vibration warnings.
 - ◇ Jolting or continuous shaking.
 - ◇ Using unsuitable equipment.



A Risk Assessment Worksheet can assist with this. A detailed example of this is included in the Safe Work Australia Hazardous Manual Tasks Code of Practice 2020.

Thinking about these things will help you to choose how to control the hazards. Hazard controls need to follow:

- ◆ Legislation (laws).
- ◆ Australian Standards.
- ◆ Codes of Practice.
- ◆ Manufacturers' specifications.
- ◆ Industry standards.



1.3.2.1 Risks Related to Manual Lifting and Handling

Risks when manually lifting and handling products, goods or materials include:



- ◆ The load on the spine during lifting.
- ◆ Controlled actions on a movement during lifting.
- ◆ Rotation and side movement of the spine during lifting.
- ◆ Postures and positions during lifting.
- ◆ Work or site layout.
- ◆ The type, weight and position of the load.
- ◆ Frequency of shifting operations.
- ◆ Distance over which load is to be shifted.
- ◆ Time allowed for the shifting of the load.

1.3.3 Control Risks

The best way to control hazards is to use the Hierarchy of Hazard Control. The Hierarchy of Hazard Control is the name given to a range of control methods used to eliminate or control hazards and risks in the workplace.

You start at the top of the list and see if you can take away (eliminate) the hazard or danger.

If you can't take it away you move down the list to see if you can swap it for something safer (substitution).

Keep working through the list until you find something that controls that hazard or danger.

This table shows you the 6 different types of controls in order from best to worst:



Hierarchy Level	Action
1. Elimination	Completely remove the hazard. This is the best kind of hazard control.
2. Substitution	Swap a dangerous work method or situation for one that is less dangerous.
3. Isolation	Isolate or restrict access to the hazard.
4. Engineering Controls	Use equipment to lower the risk level.
5. Administrative Controls	Site rules and policies attempt to control a hazard.
6. Personal Protective Equipment	The least effective control. Use PPE while you carry out your work.

Elimination, minimisation or control measures must be determined based on their order of effectiveness in reducing the risk.

You may be required to:

- Alter workplace design, layout or environmental conditions.
- Alter work processes.
- Alter items to be used to make the process safer.
- Use mechanical aids.
- Wear and use appropriate personal protective equipment.

1.3.3.1 Manual Lifting and Handling

In order to eliminate, minimise or control the risks associated with lifting and handling, you may need to consider altering the lifting process, selecting the most appropriate route, and performing housekeeping tasks.

When using a floor or pallet-jack to move a heavy load you will need to consider options for pulling or pushing. It is safer to push the load away from you rather than pull the load towards you.

If you must pull a load, make sure your path is clear and have someone direct you as you pull the load evenly with both hands.



Some lifting tasks will be too heavy or awkward for one person to safely perform. Additionally, mechanical aids may not be practical.

It is for these reasons that it is essential that you are able to determine when lifts will require a team approach.

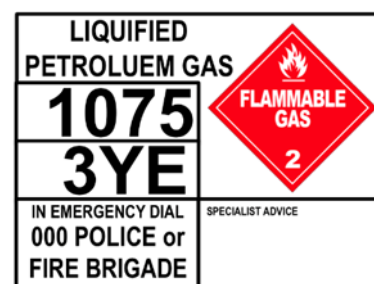
If you believe your task requires team handling, ensure that you plan for the risks involved in team lifting including coordination and communication of the lift with team members.

1.3.3.2 Dangerous or Hazardous Substances

Australia has a strong national identification code that helps with the identification of hazardous materials and chemicals (HAZCHEM).

Products, goods or materials will be labelled with a "class label" based on the hazards they pose. It is important that you are able to identify what it is you are handling and the steps to protect your and other's safety.

When planning to move a load that has dangerous or hazardous products, goods or materials, consideration has to be given to their safe movement.





You will have to consider:

- ◆ The products, goods or materials handling requirements, including the need for protective clothing or equipment.
- ◆ The potential risks to yourself or other personnel as well as the general public.
- ◆ Implications of unloading if the load has moved.
- ◆ Potential chemical spills or HAZCHEM situations.

You may need to access Safety Data Sheets (SDSs) in order to provide more information relating to the hazardous substances, and the appropriate materials handling methods required.

1.3.3.3 Goods with Loose or Liquid Contents

Goods with loose or liquid contents can make manual handling difficult as they can move around, altering their centre of gravity.

Ensure that you consider the method of packing and securing the goods, and their points of balance prior to moving the goods.

The items should be arranged in a way that prevents them from shifting unexpectedly when being handling. This may include:

- ◆ Using slings or other aids to maintain effective control when handling loads that lack rigidity.
- ◆ Making sure containers holding liquids or free-moving powder are filled so that there is only a small amount of free space at the top of individual containers.
- ◆ Keeping the contents stable in partly-filled packages by using baffles, dividers or packing materials.
- ◆ Securing loads that may move during handling.
- ◆ Shrink wrapping loads on pallets.



1.3.3.4 Personal Protective Equipment

You will need to ensure that you have selected, and are wearing the appropriate Personal Protective Equipment (PPE).

PPE is any clothing, equipment or substance designed to protect a person from risks of injury or illness, and conforms to industry and WHS standards.



PPE can include:

- ◆ Hearing protective devices, such as earmuffs and earplugs.
- ◆ Respiratory protection (filter respirators, air-line respirators, SCBA).
- ◆ Safety helmets and sun hats.
- ◆ Gloves and safety boots.
- ◆ Clothing, such as high visibility vests.
- ◆ Any substance used to protect health, for example, sunscreen.

Make sure any PPE you are wearing is in good condition, fits well and is right for the job.

If you find any PPE that is not in good condition, tag it and remove it from service. Tell your supervisor about the problem and they will organise to repair or replace the PPE.

Review Questions

5.

What is the definition of a hazardous manual task according to Work Health & Safety regulations?



6.

List five (5) possible risks when manually lifting and handling products, goods or materials.



1.

2.

3.

4.

5.

7.

What are the six (6) levels in the Hierarchy of Hazard Control?



1.

2.

3.

4.

5.

6.

8.

What are three (3) things you can do in order to eliminate, minimise or control the risks associated with lifting and handling?



1.

2.

3.

9.

What four (4) considerations do you need to make when planning the movement of a load that has dangerous or hazardous products, goods or materials?



1.

2.

3.

4.

10.

What should you consider before moving loose or liquid goods?



11.

List four (4) types of personal protective equipment.



1.

2.

3.

4.

1.4 Prepare for Load Relocation

Planning the movement or relocation of a load will help to minimise and identify potential safety and work related requirements.

Your planning should take into consideration the relevant legislation, regulations, code or practice and workplace procedures for manual handling.

