Work Safely in the Furniture-Making Industry

Learner’s Guide
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Learner’s Guide
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Section 1 – Introduction

This topic of the furnishing training package explores the activities essential to working safely within the furniture-making industry. This will include learning about:

• the obligations of all workplace parties under legislation, Regulations and codes of practice
• the implications of workplace safety on efficiency, morale and customer relations
• basic risk-management and control processes
• work health and safety Regulations/requirements, signage, equipment, material and personal safety requirements
• the purpose and use of Australian Standards®
• safe manual-handling theory and practice
• selection and application of workplace firefighting appliances
• material safety management systems, dangerous goods and hazardous-chemical handling processes
• workplace reporting procedures.

As part of the assessment requirements for this training package, you must be able to:

• accurately follow workplace procedures relevant to assessing, reporting and dealing with risks in the workplace
• identify and respond to threats to personal well-being
• operate workplace firefighting appliances
• accurately report incidents (including near misses and accidents).

Required resource materials

As you work through this topic you will be required to obtain information to fill in the blanks throughout this learner’s guide. Whilst some of this information can be provided by reflecting upon your own experiences in the workplace, other information can only be obtained from presentations and discussions in class delivered by your lecturer/trainer, and by researching the relevant materials.

The following is a list of the essential resources that are required to complete the activities, but it is by no means a definitive list and you may find other resources useful.
Suggested text resources

Occupational Safety and Health Act 1984 (WA)

Code of practice – Manual tasks 2010 (Government of Western Australia Department of Commerce)

Australian Standards®:

AS/NZS 1270:2002 Acoustics – Hearing protectors

AS 1319–1994 Safety signs for the occupational environment

AS/NZS 1336:1997 Recommended practices for occupational eye protection

AS 1473–1991 Guarding and safe use of woodworking machinery

AS/NZS 1716:2012 Respiratory protective devices

AS/NZS 2161.1:2000 Occupational protective gloves – Selection, use and maintenance


Suggested web-based resources

www.standards.org.au

www.slp.wa.gov.au

www.safetyline.wa.gov.au
Section 2 – Work health and safety (WHS)

Work health and safety (WHS) is a drive by government, both state and federal, to make the workplace as safe as possible for all workers. This has been achieved by the legislating of: dangerous acts, malicious and stupid behaviour, and dangerous processes and thoughtlessness outside the workplace.

The *Occupational Safety and Health Act 1984* and Occupational Safety and Health Regulations 1996 of Western Australia clearly point out acceptable and unacceptable conditions in the workplace, and detail the penalties – and to whom the penalties should apply – if injury to a person or damage to equipment is sustained.

**Activity 2.1**

After viewing a presentation or discussing with your lecturer/trainer, complete the following information outlining an overview of the Occupational Health and Safety (OSH) Act.

**What is work health and safety?**

Work health and safety is regulated by an Occupational Safety and Health ____________ that was passed as law in ____________ in Western Australia. It is designed to make workplaces safer and to reduce the number of incidences of ___________________________ and ___________ caused by, or sustained at, work. It is supported by the Occupational Safety and Health Regulations 1996 that outline ___________________________ for breaches in ____________ in the workplace. Where other documents, such as ___________________________ and ___________________________ are referenced by the Regulations, the contents of these documents also become enforceable by law. In turn, breaches of these codes and standards attract penalties as described in the Regulations.

**What are Australian Standards®?**

Australian Standards® are documents that determine benchmarks to ensure that materials, products, processes and services are suited to the task for which they are to be applied. They are also your guarantee that a material, product, process or service will perform consistently and reliably the task for which it is intended. These standards are determined through discussion and debate with the appropriate parties, and the consensus of opinion is then committed to a document for future reference.

Go to <www.standards.org.au> for further details on Australian Standards®.
**Activity 2.2**

Complete the following list to show the full name of the most important Australian Standards® that affect you in the furniture industry.

- AS/NZS 1270:2002
- AS 1319–1994
- AS/NZS 1336:1997
- AS 1473–1991
- AS/NZS 1716:2012
- AS/NZS 2161.1:2000
- AS/NZS 2210.1:2010

**What are codes of practice?**

Codes of practice are requirements placed on industry employers and employees to facilitate safety and other desirable outcomes in the working environment.

WorkSafeWA is the authority in Western Australia that is responsible for enforcing the OSH Regulations.

**Activity 2.3**

Complete the following information outlining the obligations of the authority.

WorkSafeWA is obliged to:

- ensure that ______________________ are followed in the workplace
- check ______________________ and ______________________
  to ensure compliance with safety requirements
- prosecute employers and ______________________ where clear breaches of Regulations can be shown to have existed.
Insert WorkSafeWA contact details below.

**Contact details for WorkSafeWA**

Address: ____________________________________________

Phone: ___________________________ Fax: ___________________________

Email: ____________________________

Website: ________________________________________________

WorkSafeWA welcomes all enquiries and respects your right to privacy when those enquiries are made.

**What is the OSH Act?**

The *Occupational Safety and Health Act 1984* is an Act that has been proclaimed by Parliament and as such forms the basis of legal requirements in the area of work health and safety. The aim of the Act is to improve the safety and well-being of *every* person in *every* workplace. The following details related to the objectives of the Act are taken from its introduction.

**Activity 2.4**

Complete the details for the following by researching the OSH Act. A downloadable PDF of the Act is available at <www.slp.wa.gov.au> or by viewing the presentation available from your lecturer/trainer.

**Note** PDF files have a useful search facility that will enable you to find the required information quickly.

**Objectives of the Occupational Safety and Health Act:**

- to promote ____________________________
- to protect ____________________________
- to promote ____________________________
- to reduce ____________________________
- to foster ____________________________
- to provide for ____________________________
- to assist ____________________________
**Employers’ responsibilities**

Employers must, as far as is practicable, provide and maintain a work environment where employees are not exposed to hazards.

To this end, the employers’ general duties under the Act include:

- 
- 
- 
- 
- 
- 

**Employees’ responsibilities**

Under the Act, employees also have a responsibility to take reasonable care for their own health and safety at work and for the health and safety of other people. To this end, the employees’ general duties under the Act include:

- 
- 
- 
- 
- 
- 

Section 3 – Risks and hazards in the workplace

What is a risk?

A risk can be defined as the exposure to a chance of injury or loss; a hazard or dangerous chance. We can all be guilty of taking risks on a regular basis, such as running across a busy road. In the workplace, what may seem like a small risk – such as not wearing a piece of PPE or leaving a piece of moving machinery unattended – could have far more serious consequences than some of the risks that you may take in your own time.

What is a hazard?

In the workplace, a hazard can be defined as a source of potential damage, harm or injury to the health of someone or something. Wherever possible, workplace hazards should be removed or minimalised to prevent them from causing harm to workers.

Activity 3.1

After viewing a presentation or discussing with your lecturer/trainer, complete the following information to show the seriousness of taking risks at work and the danger of hazards in the workplace.

A risk is a ___________________________ where that person has chosen (of their own free will) to be exposed to the possibility of ___________________________.

Unfortunately, risks may involve other people who have not made irresponsible decisions.

In short, it is an _________________________ that results in putting oneself or one’s fellow workers into situations that may result in ___________________________.

What is a hazard?

A hazard is ___________________________ that could result in an accident when ___________________________. Unfortunately, when not eliminated or minimised, hazards put all workers at risk.

Hazards can lead to accidents. To reduce the risk of an accident occurring, remove the hazard from the workplace wherever possible.
Activity 3.2

For the following exercise, you are required to list at least five different and separate hazards that may occur in a furniture-making workplace from time to time, and explain how you would reduce the risk of an accident resulting from those hazards. (Hint: Look for issues to do with equipment such as: faulty switching, fire extinguisher access, walkway and emergency exit issues, traction on floors where machines are located, flammable liquid storage issues, cluttered work areas, etc.)

Example

Access to the emergency stop button is blocked by a pack of melamine sheeting. Rectify by racking or relocating the sheet material as soon as it is noticed. The hazard should be reported to the occupational safety and health (OSH) representative only if the practice of blocking the emergency stop button continues.

1. _______________________________________________________________________

   _______________________________________________________________________

2. _______________________________________________________________________

   _______________________________________________________________________

3. _______________________________________________________________________

   _______________________________________________________________________

4. _______________________________________________________________________

   _______________________________________________________________________

5. _______________________________________________________________________

   _______________________________________________________________________
Understandably, not all hazards in the workplace can be eliminated, for instance: noise. Whilst it is not possible to remove noise completely from the workplace, it is possible to minimise its effect on other workers. For example, machines can be partitioned off or set up in workshops that are detached from the main assembly workshop. This would contain the level of noise to a single work area, which will minimise the needless exposure of other workers to it. When dealing with workplace hazards, it is important to give a lot of thought to determining solutions.

Designers of factories where exposure to hazards is simply unavoidable now adopt a well-known process called the hierarchy of hazard control in determining building layouts. This process requires an industry expert/consultant to establish the various hazards that may exist in the workplace and then selecting the most appropriate method(s) of dealing with those hazards in a sequence of priority. Options for controlling hazards are ranked in a table that lists them in order of best practice (at the top), down to the last resort.

Activity 3.3

Complete the hierarchy of hazard control table below with examples of hazards that can be easily dealt with at each level of the hierarchy, and describe an effective way of dealing with that hazard.

Hierarchy of hazard control

<table>
<thead>
<tr>
<th>What to do</th>
<th>Example of hazard</th>
<th>How to do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>eliminate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>substitute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>enclose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>isolate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>engineer controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>work practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>administer controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>train</td>
<td></td>
<td></td>
</tr>
<tr>
<td>personal protective equipment (PPE)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note The control method listed highest in the table will offer the best measure of protection against the hazard and should always be considered as the first option where practicable.

PPE is considered only as a last resort, and should not be used in place of a control method listed higher in the table. PPE should be worn at all times whilst in the presence of any hazard.
Section 4 – Identification of hazards

Safety sign requirements

The identification of hazardous situations has usually been carried out in the workplace before you get there. Known hazards are identified by the placement of a standard sign indicating the nature of the hazard in the vicinity of that sign.

Safety signs are intended to draw attention to potentially harmful or hazardous situations. To do this effectively, the signs need to be placed carefully and in accordance with Australian Standard ® AS 1319–1994 Safety signs for the occupational environment; Section 4.2, Sign location.

Research

Obtain a copy of AS 1319–1994 Safety signs for the occupational environment from your library and complete the following information relating to the location of safety signs in the work environment.

Visibility

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Sitting of signs

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Regulatory and hazard signs


Movable objects


Illumination


Activity 4.1

Whilst you have access to AS 1319–1994 Safety signs for the occupational environment, explain the meaning of each sign shown below and how this should affect your work practice.

Example

Hazard: Toxic chemicals in this area

Caution must be taken in this area whether someone is working in it or just passing through it. Any spillage or contamination of persons must be reported and designated quarantine and/or clean-up processes must be followed explicitly.

Fig 4.1

Fig 4.2

Fig 4.3
Fig 4.7

Fig 4.8

Fig 4.9
Identification of hazards

Section 4

Fig 4.10

Fig 4.11

Fig 4.12
Identification of hazards

Section 4

Fig 4.16

Fig 4.17

Fig 4.18
Section 5 – Fire safety and emergency evacuation

Fig 5.1

There are a number of types of fire extinguisher available on the market, many of which are intended for a specific purpose. Fire extinguishers are usually the first line of defence in the case of an unexpected fire in the workplace. Knowing which extinguisher to use can be confusing, but when armed with a little knowledge, making that selection is a simple task.
A point to consider about fires is that they do not all involve the same burning materials. Therefore, not all fires are fought with the same types of fire extinguisher.

The three different classes of fire that you need to be aware of are:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A fires</td>
<td>These fires involve ordinary combustible materials, such as paper, wood, textiles and plastics. This classification can be remembered because of the characteristic ashes (A) left after the fire.</td>
</tr>
<tr>
<td>Class B fires</td>
<td>These fires involve flammable liquids, such as petrol, kerosene, thinners and lacquers. These can be remembered because the materials that are burning can all boil (B).</td>
</tr>
<tr>
<td>Class C fires</td>
<td>Class C fires involve combustible (C) gases, such as methane, propane and butane.</td>
</tr>
</tbody>
</table>

Finally, you need to be aware that some fires occur in areas that are electrically unsafe. These are referred to as Class E fires: E for electricity.

**Activity 5.1**

After viewing a presentation or discussing with your lecturer/trainer, complete the required information in the activity they will present to you.
Which extinguisher should I use?

See your lecturer/trainer for the current fire extinguisher brochure and Activity 5.1.
Emergency evacuation procedures

Emergency evacuation procedures are put into place to ensure the safety and well-being of all people involved in an emergency situation. For an evacuation procedure to be successful it must be:

- written down for all to see
- practised from time to time so that the procedure becomes second nature
- accompanied by a graphic to complement the requirements.

Only by adhering to all the above points can such a procedure be effective and possibly save lives in an emergency situation.

See the following page for an example of an emergency evacuation procedure.
Emergency evacuation procedure

When the emergency alarm is sounded, all campus occupants must:

1. Proceed to the nearest building exit – exits are clearly defined and illuminated.
2. Proceed to the designated assembly area for the building you are exiting – refer to the map.
3. Remain in the assembly area until the ‘all clear’ has been given and the area warden controlling the area directs your next course of action.

Personnel are not to re-enter any building or move from the assembly area without prior permission/direction from the area warden.

Important

Lecturing staff

1. Collect the roll/time book before evacuation.
2. Check the attendance record in order to account for all students present within the assembly area.
3. Report to the area warden responsible for the assembly area that all students are present or that some individuals are missing.

The Occupational Safety and Health Act and Regulations clearly identify that all employers, employees, self-employed persons, apprentices/trainees and students ‘shall take reasonable care to ensure his/her own safety and health at work’.

Help us protect your well-being by knowing what to do in any emergency and always following the directions of the area wardens appointed to guide you to safety during an evacuation.
Ask your lecturer/trainer for a current evacuation procedure map.
Section 6 – Personal protective equipment (PPE)

PPE is essential to your personal well-being. Failure to observe personal protective measures such as the wearing of personal protective equipment could lead to you sustaining an acute and/or chronic injury that could have a negative effect on your earning potential and quality of life in later years. Therefore, it is mandatory that the PPE recommendation is adhered to in all machine operations and where any safety sign is displayed.

Before entering a machine shop or carrying out any activity identified as requiring PPE, you **must** be wearing the appropriate personal protective equipment; this may include:

- **eye protection**
  
  It is necessary to wear safety glasses, goggles or face shields at all times in areas where small flying fragments or dust can be encountered.

- **hearing protection**
  
  Hearing protection must be worn at all times. The type of hearing protection needed will depend on:
  - the personal choice of the operator for comfort and fit
  - the level of noise reduction required (ear muffs will reduce more noise than ear plugs).

- **footwear**
  
  Suitable footwear must be worn at all times. Closed shoes with leather uppers or safety boots are appropriate.
• **clothing**

It is important to remember that while you are working in the machine shop you should not wear loose clothing or jewellery because it may get caught in revolving cutters. The moving parts of a machine revolve at high speeds, so if any loose clothing or jewellery is caught in these cutters you could be dragged into the machine – this could result in serious injury or even death.

• **hairnet**

It is important to remember that while you are working in the machine shop, your hair may become entangled in the moving parts of some machines, such as the drill press. Each hair may be weak on its own, but when a rotating machine part picks up a handful of hair, the hair strands will react like a rope and won’t break. This results in much of the scalp being torn from the head. If you have long hair, it is imperative that it is contained while you are using machines.

• **gloves**

Gloves are often overlooked in the trade, but they are, in fact, a practical piece of safety equipment. They should be used, for example, in the polish shop when you are handling chemical materials, and in the timber store for handling sheet material such as melamine board, or for stacking or handling rough-sawn timber.

• **respiratory protection**

Suitable respiratory protection must be worn when you are performing work that creates dust and debris. Inhaling these particles is harmful, especially to those suffering from respiratory complaints such as asthma. Always wear protection, for instance, a dust mask, when you are in an area where dust is being created. You may also need to wear respiratory protection from fumes for certain jobs.
Activity 6.1

Consulting the OSH Regulations, identify the PPE that should be worn when you are conducting the activities listed below.

Example

When using a **palm sander** to sand a carcase, the PPE required is:

- a dust mask to prevent inhalation of dust particles, especially if you normally suffer from breathing difficulties such as asthma
- hearing protection – because the carcase acts as a resonator, just like a drum. The projected sound level is significantly over the 85 dB level that is considered the safe level of sound under the OSH Regulations.
- eye protection, such as safety glasses, as the dust particles may cause dry, irritated eyes.

1. When using a **laminate trimmer** to trim sheet laminate for a kitchen benchtop, the PPE required is:

2. When using a **jigsaw** to cut an irregular shape component from sheet material, the PPE required is:
3. When using a **belt sander** to clean up solid timber shelving for a bookcase, the PPE required is:

4. When using a **router** to apply a moulding to the edge of an occasional tabletop, the PPE required is:

5. When using a **drill press** to drill holes for dowels in the face of an end panel, the PPE required is:

6. When using a **hammer drill** on site for drilling into brickwork to install cabinets, the PPE required is:
7. When mixing **toxic chemicals** for adhesives such as urea formaldehyde, the PPE required is:

________________________________________

________________________________________

________________________________________

________________________________________

**Note** The use of personal protective equipment is not optional – it is mandatory. All power tools used in the trade require the operator and those in close proximity to wear PPE while the tool is in use.

All toxic chemicals have an associated material safety data sheet (MSDS), and all requirements listed on the sheet for the safe use of the chemical **must** be strictly adhered to.

---

**Activity 6.2**

This activity requires you to have access to a suitably equipped workshop and sound-level machine. With the assistance of your lecturer/trainer, and whilst wearing approved PPE, accurately record the noise levels for the sources listed below.

<table>
<thead>
<tr>
<th>Source</th>
<th>Noise Level (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>palm sander</td>
<td></td>
</tr>
<tr>
<td>jigsaw</td>
<td></td>
</tr>
<tr>
<td>laminate trimmer</td>
<td></td>
</tr>
<tr>
<td>spray booth extraction</td>
<td></td>
</tr>
<tr>
<td>portable router</td>
<td></td>
</tr>
<tr>
<td>mitre saw</td>
<td></td>
</tr>
</tbody>
</table>
Notes
Section 7 – Manual handling

The information given below is a summary of good practice that should be applied when you are manually shifting loads. For the most up-to-date information on manual handling in Western Australia, refer to the latest code of practice for manual handling available from WorkSafeWA <www.safetyline.wa.gov.au>.

Manual-handling considerations

The hierarchy of control methods for managing the risks associated with manual handling are listed below as a guide to best practice when it comes to preventing injuries throughout the lift.

Control methods (in order of priority)

1. **Redesign the task or work routine** – is the lift really necessary?
2. **Redesign the package or container** – can you make it less bulky or easier to grasp?
3. **Use mechanical aids**, such as a hand truck, grapplers or a trolley.
4. **Use team lifting** – don’t be a hero, ask for help.
5. **Use good lifting techniques** – bend your knees and not your back.

1. **Redesign the task or work routine**
   By analysing the way the work is done, you can reduce the amount of manual handling necessary. The speed and frequency of the manual handling may also be reduced.

2. **Redesign the package or container**
   Look at the size, shape and construction of the package or container that needs to be moved in the workplace. Smaller and lighter packages are more easily lifted, so ask yourself whether the item(s) within the package/container can be repacked into something more compact for easier lifting. Attention should be also paid to work practices – even when the packages or containers are made smaller or lighter, people may still be tempted to handle several items at one time.

3. **Use mechanical aids**
   If a forklift, pallet mover or trolley is available, use it. By reducing the amount of manual handling you have to do, you will reduce the chance of injury.
Mechanical aids are useful devices to employ when you are required to handle heavy loads. Types of these include:

- **piano trolley**
  Although the piano trolley is specifically designed to move upright pianos, it can be used in a variety of situations as it has the advantage of being able to handle heavy loads.

  ![Fig 7.1](image)

- **forklift**
  Forklifts are used for unloading and loading trucks, moving items around the workplace and stacking. *(Note You need a licence to operate a forklift.)*

  ![Fig 7.2](image)

- **hand pallet-truck**
  A hand pallet-truck is designed to lift and transport goods on a standard pallet or platform. It can be operated by hand, hydraulics or electrically. It is used for moving materials around production areas.

  It is not suitable for:
  - stacking
  - loading or unloading road/rail vehicles, except from an elevated dock.

  Some electric pallet-trucks have the ability to lift loads as well.

  ![Fig 7.3](image)
• **powered pallet-truck**

These trucks are used for moving pallets from place to place, and for the quick and efficient loading and unloading of pallets in containers.

![Fig 7.4](image)

• **furniture straps**

Furniture straps are used for lifting and carrying items over short distances. Webbing is used to tie straps together if there is a danger of loose straps slipping on a smooth surface.

The main advantage of straps is that – because they are placed around your shoulders, which take most of the weight – they leave your hands free to manoeuvre and push the load away from the body.

Furniture straps and webbing are used on heavy and bulky items such as pianos, wardrobes, refrigerators, washing machines and cupboards.

![Fig 7.5](image)

![Fig 7.6](image)
• dolly
The dolly is a flat platform on four castor wheels. It is ideal to use within confined spaces and has a variety of uses. Originally designed for office removals, it is often used for domestic purposes as well. Its design allows the platform and its load to be moved easily.

• two-wheeled hand/fridge trolley
This trolley is used for general removals and is suitable for a variety of articles.

The trolley should be kept in good condition and must never be overloaded. The foot of the trolley may be extended using planks of wood so that the load is evenly distributed.

• six-wheeled trolley
This trolley is similar to the two-wheeled hand/fridge trolley. It is designed to move loads up and down stairs. The three pairs of wheels rotate from one step to the next. It has a quick-release fastening to secure the load, as well as webbing for protection. The six-wheeled trolley can also be locked into a two-wheeled position for use along the ground. It is worth noting that it can be difficult to manoeuvre in confined areas. You should also take care when coming down stairs as the trolley has a tendency to jar the load.
4. **Use team lifting**

Team lifting is a better way to move things – it divides the strain between two or more people.

5. **Use good lifting techniques**

Make sure that when you lift something you use the correct technique, for example, bending your knees instead of your back. This will lessen the chance of a serious – and possibly permanent – injury. Back injuries cause loss of production and money to your employer and to you, and can even cost you your job in the long run, so it pays to take care.

**Good lifting techniques**

Manual-handling strategies are particularly important when you need to carry long lengths of timber or sheets of manufactured board that are placed on a machine or used as drawing boards to complete a full size set-out.

Before starting any manual task, such as lifting, lowering, pushing, pulling or carrying, you need assess the situation. This is commonly referred to as 'sizing up the load'.

Lifting a heavy object can strain your back and knees. There are 10 safe steps to follow when you have to lift a heavy object:

**Step 1** Assess the load:

- its overall size and shape
- areas where you can get a firm grip on it
- its weight – you should only try to manually handle loads that weigh under 20 kg; loads weighing more should be shifted by mechanical aids.

**Step 2** Get as close to the load as possible.

**Step 3** Set your feet apart for balance.

**Step 4** Relax your knees.

**Step 5** Lower your body by bending your knees.

**Step 6** Lower your head.

**Step 7** Get a firm grip on the load.

**Step 8** Raise your head and look ahead.

**Step 9** Straighten your legs to lift the load.

**Step 10** After lifting, turn your feet before walking.
6. **Redesign the workstation**

In workplaces where people mainly have to sit down to do their job, redesigning the workstation by making the benches, shelves or desks adjustable to an appropriate height will help to reduce bad posture and manual-handling injuries, and can also increase productivity.

**Activity 7.1**

**What is manual handling?**

After viewing a presentation or discussing with your lecturer/trainer, complete the following information to resolve issues relating to manual handling and manual-handling practices.

In the furniture trade the term ‘manual handling’ means more than just lifting or carrying something. It refers to any activity where the use of __________ is exerted by a person to __________, __________, __________, __________, __________, __________ or __________ any object, including furniture, cabinets, machines and power tools.

Some examples of actions in the furniture-making industry that may cause manual-handling injuries are:

- **sudden** ____________________________________________________________________________
- **work** ______________________________________________________________________________
- **work** ______________________________________________________________________________
• work

• heavy

• work

Bad manual-handling practices are highlighted by excessive fatigue and bad posture. Aspects of the workplace that lead to fatigue and bad posture are:

•

•

•

•

The type of injury suffered from inappropriate and ineffective manual-handling processes ranges from sudden and immediately painful (acute) injuries to declining well-being and throbbing (chronic) pains. Examples are:

<table>
<thead>
<tr>
<th>Acute</th>
<th>Chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
In order to minimise the risk of injury, the following six points should be considered before embarking on any physical task.

1. ____________________________________________
2. ____________________________________________
3. ____________________________________________
4. ____________________________________________
5. ____________________________________________
6. ____________________________________________

Other considerations that will reduce the incidence of injury include:

lightening loads by:

• ____________________________________________
• ____________________________________________
• ____________________________________________
• ____________________________________________
• ____________________________________________

reducing movements such as bending, twisting and reaching by:

• ____________________________________________
• ____________________________________________
• ____________________________________________
• ____________________________________________
• ____________________________________________
preventing muscle strain and fatigue by:
• 
• 
• 
• 
• 

maintaining a safe working environment by making sure that:
• 
• 
• 
• 
• 
• 
• 
•
Section 8 – Reporting a hazard

Even though you may have been maintaining work health and safety standards, accidents can still occur in the workplace. This is because hazards exist all around us. Some hazards are due to carelessness, while others exist simply because we are either too busy to do anything about them or we do not take enough time to analyse the work area for potential hazards. Should an accident occur in the workplace in Western Australia, someone is required to fill out an incident report for WorkSafeWA.

A witness to the incident would normally write the report, but anyone working in the area where the incident occurred could also be required to do it. This report is then passed on to the occupational safety and health (OSH) representative, the factory manager, supervisor or employer for further action.

Remember, you must report all:

- incidents
- injuries
- hazards
- near-misses.

If there is an accident and you don’t know what to do, you should:

- contact:
  - 
  - 
  - 

- attend to your co-worker
  - 
  - 
  -
The hazard/incident report

Hazard/incident report forms exist in various formats and designs, and can be found in all medium-to-large companies and also in many small businesses. Forms such as a hazard/incident report are used to outline concerns about circumstances that may pose a risk to a worker.

Whenever you are required to fill out a hazard/incident report form, remember that the desired outcome is to have the hazard rectified as soon as possible, so it is no longer endangering staff. To do this effectively, you need to be as descriptive as possible in the details you give.

The following form is a typical example of a hazard/incident report used in a medium-to-large business in Western Australia. These reports are submitted to the business' OSH committee, which will review it along with any other hazard/incident reports submitted. The committee will then prioritise according to the seriousness of the situation and recommend how it should be addressed or rectified.

Discussion

Analyse and discuss this form with your lecturer/trainer before reflecting upon a hazardous situation in your workplace. Then complete a hazard/incident report addressing that particular hazard.

Hazard/incident report form

Guidelines

Scope   This form must be used to report all hazards and incidents that could contribute to an accident or compromise the health and safety of staff or persons visiting the workplace.

How to use this form

1. The person reporting any hazard/incident must immediately notify his/her OSH representative, who will notify the area manager, and take any necessary steps to isolate or make the location safe with due care and within 24 hours. The person reporting the hazard/incident is required to complete Section A of the report. The area manager must ensure that the general manager is informed as soon as possible.
2. Unless the hazard/incident can be rectified immediately, the area manager must conduct an investigation into the relevant occurrence as soon as possible, in conjunction with the OSH representative to determine the cause(s) and implement corrective action to prevent it from happening again.

**Distribution of the completed form**

Distribution will be the responsibility of the area manager, who must ensure that the form is completed correctly, as follows, before distribution:

**Original to**
- general manager

**Copies to**
- area manager
- OSH representative
- chairperson of the OSH committee

**What are you reporting?**
- [ ] hazard – exposure to danger or harm
- [ ] incident – an occurrence or event

**Note** If the hazard/incident has been rectified, the form can be processed without the OSH representative’s signature.

**Hazard/incident report**

**To be completed by the person reporting the hazard/incident**

**Note** If there is insufficient space, use the back of the form.
Section A: Location of hazard/incident

Work area: ____________________  Department/branch: ____________________

Description of hazard/incident:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Name of OSH representative notified of the hazard/incident:

________________________________________________________________________

Name of manager notified of the hazard/incident:

________________________________________________________________________

Date notified: ______ / ______ / ______  Time notified: __________ am/pm

Name of the person who completed this form:

________________________________________________________________________

Department/branch: ______________________  Contact no: ______________________

Signature: __________________________  Date: ______ / ______ / ______
Section B: Action taken by OSH representative/area manager upon notification of the hazard/incident

Has the general manager been notified?  □ yes  □ no

If no, please give reasons:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Any immediate/temporary action taken to ensure safety of the location?
□ yes
□ no

If yes, please provide description of action taken:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

If no, please provide reasons:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Names of the OSH representative and area manager:

________________________________________________________________________

Department/branch: ___________________________ Contact no.: ___________________

OSH representative’s signature: ___________________ Date: _____ / _____ / _____

Area manager’s signature: ______________________ Date: _____ / _____ / _____
Section C: To be completed by the area manager in conjunction with the OSH representative

Corrective action taken or recommended by whom and how:

________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________

Date for action to be completed: ______ / ______ / ______

Further action:

________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________

Outcomes:

________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________

Date of investigation: ______ / ______ / ______ Time: ________ am/pm

Investigating officer’s signature: ________________________________

Date: ______ / ______ / ______

Name: ___________________________ Department/branch: _____________

OSH representative’s signature: ________________________________

Date: ______ / ______ / ______

Name: ___________________________
Section D: Follow up by OSH committee

Date presented to OSH committee: ______ / ______ / ______
by whom: ______________________________________________________

Committee actions/comments

________________________________________________________________
________________________________________________________________
________________________________________________________________
__________________________

Signature of chairperson: _________________________________________
Date: ______ / ______ / ______

Any further comments – other factors directly related to this incident

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
Notes
Section 9 – The accident report

An accident report is another typical type of form that periodically needs to be completed by someone from the workplace. When you make a report of an accident, remember that the intention is to identify, where possible, the contributing factors to the accident. While an accident report is being prepared, someone may discover a hazard that contributed to the cause of the accident. Therefore, a hazard/incident report form should also be submitted immediately.

The following form is a typical example of an accident report used in a medium-to-large business in Western Australia. This report should be submitted to the business’ OSH committee for review. The committee will then identify strategies that can be put into place to prevent the repetition of such an accident, and oversee the implementation of those strategies.

Where the company is compelled by law to supply information to the WorkSafe Commissioner under the Notifiable Accidents requirement of the Occupational Safety and Health Act 1984, the committee will forward the details of the accident to WorkSafeWA.

Discussion

Analyse and discuss the following accident report with your lecturer/trainer. Compare it with the recording system and processes in place at your workplace. This form contains all of the requirements of WorkSafeWA for the reporting of a serious accident in the workplace as required by the OSH Act.

Reflect on an accident in your workplace or discuss a notifiable accident with your lecturer/trainer, and complete the form in relation to this accident.

Accident report form

Guidelines

Scope This accident report form must be completed at the time – or within 24 hours – of an accident where injury, occupational disease or disability requiring first aid or medical treatment is sustained by any employee or visitor to the workplace. It is not for minor accidents/injuries, which must be recorded in the Minor First Aid Register.
Purpose

This form should be completed to ensure that full details of all accidents are recorded and are fully investigated to prevent recurrences. Statistical information from this report will be kept by the business to support the development of preventive strategies in the future.

Investigating the accident

Each accident must be investigated in order to determine its cause and to ensure prevention of similar occurrences. The investigation should be conducted by the manager/supervisor of the injured person, in conjunction with the OSH representative.

Completing the report

When completing the report, please answer all questions by printing the details and/or marking the appropriate boxes. Once the accident has been investigated, the report form should be forwarded as per the distribution list to ensure corrective action is taken.

Legal obligations

WorkSafeWA must be informed immediately if an accident causes:

- loss of life
- amputation of a hand or foot
- loss of sight of an eye
- serious bodily injury (such as fracture of the skull, spine or pelvis, or where expected time off work is 10 days or more)
- fracture of any bone in the arm, other than the wrist or hand
- fracture of any bone in the leg, other than a bone in the ankle or foot.

Distribution of the completed form

The original copy of this report should be retained by the general manager, who is responsible for the distribution as follows:

Copies to

- area manager
- OSH representative
- chairperson of the OSH committee
Note If all parties are satisfied that no further investigation is required, the form can be forwarded without the OSH representative’s signature.

Workplace:  | WorkSafeWA accident number:

---

Part A: Report of accident

1. Injured person’s details (tick appropriate boxes)

- Staff  - Student  
- Visitor  - Contractor

Date of accident: _____ / _____ / ______

Time: ________________ am/pm

Other

Location: ____________________________

Block: ____________________________  Room no: __________________

Name: ____________________________  Position: __________________

ID: ____________________________

Department/branch: ____________________________

Home address: ____________________________

________________________________________  Post code: __________

Home phone: ____________  Work: ____________  Mobile: ____________

When the accident was first reported and to whom:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Note Where there is a delay in the reporting of the incident, reasons for the delay should be detailed on the back of the form.
## 2. Witness(es) to accident

<table>
<thead>
<tr>
<th>Name:</th>
<th>Phone:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company:</td>
<td></td>
</tr>
<tr>
<td>Position:</td>
<td>ID:</td>
</tr>
<tr>
<td>Address:</td>
<td>Post code:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name:</th>
<th>Phone:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company:</td>
<td></td>
</tr>
<tr>
<td>Position:</td>
<td>ID:</td>
</tr>
<tr>
<td>Address:</td>
<td>Post code:</td>
</tr>
</tbody>
</table>

## 3. Treatment received (tick appropriate box)

- [ ] First aid
- [ ] Sent to hospital
- [ ] Other: ____________________________
- [ ] Name of first aid officer: ____________________________
- [ ] Sent to doctor
- [ ] Ambulance
4. **Nature of injury** (tick appropriate boxes)

- □ Disease/infection
- □ Concussion
- □ Amputation
- □ Superficial injuries
- □ Burns/scalds
- □ Multiple injuries
- □ Electrical injury *(Must contact EnergySafety – 1800 678 198)*
- □ Other: ____________________________

5. **Parts of body affected** (tick appropriate boxes)

- □ Eye
- □ Back
- □ Hands and/or fingers
- □ Feet and/or toes
- □ Head
- □ Trunk
- □ Shoulder and arms
- □ Neck
- □ Hips and/or legs
- □ Internal organs
- □ Multiple locations: ____________________________
6. **Full description of accident** – describe what actually happened and how the accident was caused

(Note If there is insufficient space use the back of the form.)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Name of person filling out this form: ________________________________
Position: ____________________  Department/branch: ____________________
Contact number: ________________
Signature: ____________________  Date: ________________
Injured person's signature (if available): __________________________
Part B: Investigation (to be filled in by the OSH representative, supervisor and injured person)

1. Safety check at the time of the accident (tick appropriate boxes)

   a) Has the person been trained in the task relating to this injury? □ □ □
   b) Was the appropriate work method used? □ □ □
   c) Were the correct equipment/materials available? □ □ □
   d) Were the correct equipment/materials used? □ □ □
   e) Was safety equipment available? □ □ □
   f) Was safety equipment in use? □ □ □
   g) Any other contributing factors? □

   If 'no' or box g) was ticked, give details of the corrective actions that took place:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

2. Notification check

   If the injured person was a student under 18-years-old his/her parent/guardian and employer must be notified.

   Date: ______ / ______ / ______ Time: ____________ am/pm

   Name of notified person/relationship: __________________________________________________________
3. Investigation result: findings and recommendations

(Note If there is insufficient space use the back of the form.)

__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________

Recommendations implemented and checked by the OSH committee on:
Date: ______ / ______ / ______  Time: _______ am/pm
Chairperson's name: ____________________________
Signature: ________________________________________
OSH representative's signature: ________________________________
Date: ______ / ______ / ______  Time: _______ am/pm

Any further comments – factors contributing to the accident

__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
Section 10 – Workplace incident and injury statistics

Workplace incident and injury statistics are collected and compiled by the National Occupational Health and Safety Commission (NOHSC). The statistics are used by employers, insurance companies and various government departments to establish areas of high risk. These are areas that need to be looked at so that new policies, work practices or operational procedures can be put in place to reduce the injury rate and/or the severity of the injury that might occur during a similar process in the future.

The data is published and often categorised as follows:

• nature of injury (the type of injury or disease)
• part of the body affected by the injury or disease
• source of injury (immediate or main cause of the injury)
• event (the type of accident resulting in the injury – for example, impact, crush or fall)
• industry in which the injured worker was employed at the time of the accident
• occupation of the injured or ill worker
• state in which the injury, disease or fatality occurred
• gender (sex)
• age (in age groups).

Specific data relating to workplace injuries in the furniture-making industry throughout Western Australia can be found at <www.safetyline.wa.gov.au>.

Has the web page changed its name? If so, insert the new address here – see your lecturer/trainer for details.

Research

Look closely at the type of injury sustained and the percentage of reported incidents of that kind of accident with regard to the four listed machines and then answer the question.
Are these accidents the kind of accidents that you have been made aware of by your lecturer/trainer?

<table>
<thead>
<tr>
<th>Machine</th>
<th>Yes □</th>
<th>No □</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circular saw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crosscut saw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planing machine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Band saw</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you answered **no** to any of these machine risks, discuss the safety aspects of the machine with your lecturer/trainer once again.

**Activity 10.1**

**Understanding incident and injury statistics related to woodworking machines**

Refer back to <www.safetyline.wa.gov.au> to complete the following exercises.

List the three most common accidents known to occur during the use of circular saws.
1. 
2. 
3. 

List the three most common accidents known to occur during the use of crosscut saws.
1. 
2. 
3. 

List the three most common accidents known to occur during the use of planing machines.
1. 
2. 
3. 
List the three most common accidents known to occur during the use of band saws.
1. 
2. 
3. 

List the three most common accidents known to occur during the use of spindle moulders.
1. 
2. 
3. 

Panic-mode versus control

In the case of an accident or emergency in the workplace, there needs to be a very controlled and coordinated response if those people involved are to emerge unscathed or, at the very least, with minimal impact on their safety. Each person in the workplace should have a particular responsibility in a given situation. If this is not the case, especially in large companies, panic and mayhem may set in and actually cause people serious injury or, worse still, cost them their lives.

Following is an example of a controlled response to an electrical accident on a machine where a worker (Cassie) receives an electric shock; the incident is witnessed by an apprentice (Max), who has his Bronze Medallion.

<table>
<thead>
<tr>
<th>In case of worker receives an electric shock</th>
<th>Contact</th>
<th>Action to take</th>
<th>Max’s responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• employer</td>
<td>• isolate power</td>
<td>• isolate power</td>
<td></td>
</tr>
<tr>
<td>• foreman</td>
<td>• obtain assistance</td>
<td>• provide life support</td>
<td></td>
</tr>
<tr>
<td>• area supervisor</td>
<td>• check for electrical or other danger</td>
<td>• obtain assistance</td>
<td></td>
</tr>
<tr>
<td>• first aid officer</td>
<td>• administer CPR if required (DRABC)</td>
<td>• contribute to accident report</td>
<td></td>
</tr>
<tr>
<td>• OSH representative</td>
<td>• monitor casualty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• ambulance</td>
<td>• advise contact list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• next of kin</td>
<td>• compile accident and/or hazard/incident report</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Clearly, when the list of duties is broken down into a table like this, Cassie has a greater chance of survival. What would her chances of survival be if Max was to panic?

**Activity 10.2**

Using the example above, complete the following table of accidents/incidents. Exhaust your contact list, and fully describe the appropriate actions to take in each case. Write in detail what you believe your responsibilities are in each case, but only after you have consulted your lecturer/trainer or supervisor/employer to ensure that this information is accurate.

<table>
<thead>
<tr>
<th>In case of</th>
<th>Contact</th>
<th>Action to take</th>
<th>Your responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>apprentice (16 years of age) sustains a severe laceration to the right index finger after slipping with a chisel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tradesperson (45 years of age) sustains a severe laceration to the right index finger after slipping whilst using a band saw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>machine mishap resulting in damage to a saw blade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a fire has broken out amongst flammable liquid kept at the factory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>poor housekeeping has resulted in many slip/trip hazards in the workshop</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 11 – Case studies

Your lecturer/trainer will provide you with a set of case studies. Thoroughly read each one and answer the questions about the case with reference to the expected requirements of your workplace.

When answering the questions, you should consider OSH legislative requirements as well as the rights of the:

- employer
- tradespeople
- other apprentices
- cleaners
- technicians
- labourers
- factory hands.
Work Safely in the Furniture-Making Industry
Learner’s Guide

DESCRIPTION
This learner’s guide has been developed to assist in the delivery of Certificate I, II and III in furniture-making and cabinet-making qualifications. It contains information and activities that cover risks and hazards in the workplace; prevention, identification and reporting of hazards; and case studies for the learner to work through.

EDITION
Second edition

CATEGORY
Building and Construction

RELATED PRODUCTS
BC2013 Join Solid Timber
BC2014 In the Workshop
BC2015 Use Furniture-Making-Sector Hand Tools and Power Tools
BC2017 Apply Sheet Laminates by Hand
BC2018 Prepare Surfaces for Finishing
BC2019 Hand Make Timber Joints

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