

# LEARNER GUIDE



## CONSTRUCTION INDUCTION (WHITE CARD)

Training support material for:  
CPCWHS1001 -  
Prepare to work safely in  
the construction industry

Includes training tasks

Produced by:



# ABOUT CONSTRUCTION INDUCTION

SAMPLE



## Workplace health and safety in the construction industry

People working in construction need proof that they have completed a general Workplace Health and Safety (WHS) induction for the construction industry.

Previously, states and territories have had their own requirements or qualifications for a person to provide this proof of training, for example, NSW – Green Card, VIC – Red Card, QLD – Blue Card etc.

While mutual recognition of these cards occurs between many states and territories, there is now a nationally recognised general induction training qualification (CPCWHS1001 - Prepare to work safely in the construction industry) which has been jointly developed and agreed upon by all state and territory health and safety authorities.

The national qualification is commonly known as the **White Card**.

### Note:

Keep a photocopy of your White Card. If you happen to lose the original you may not be allowed on the worksite whilst you are waiting for a new card.

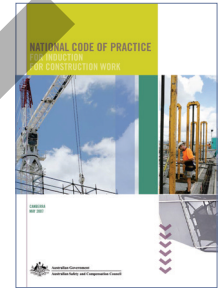


## National code of practice of induction for construction work

The code brings together best practice approaches from Australian state and territory health and safety authorities into a framework to promote a nationally uniform approach to workplace health and safety induction training in the building and construction industry.

This code of practice provides guidance to persons working in the general and residential construction sectors. It covers:

- The type of induction training that may be needed to provide construction workers with an awareness and understanding of common hazards on construction sites.
- How these hazards should be managed.



The code is supported by the Unit of Competency — CPCCWHS1001 - Prepare to work safely in the construction industry / CPCWHS1001 - Prepare to work safely in the construction industry. This unit is contained in the CPC Construction, Plumbing and Services Training Package, enabling delivery within the VET sector.

## Induction training falls into three categories

- **General induction**
- **Site specific induction**
- **Task specific induction**

Site specific and Task specific induction training have no formal training or assessment requirements.

However, an employer is under a **duty of care** under the health and safety Act to provide employees with information, instruction, training and supervision as is necessary to perform their work safely.



## Aims of general induction training

**General induction training** aims to provide persons with a basic knowledge of workplace health and safety legislative requirements, principles of risk management and the prevention of injury and illness in the construction industry.

General induction training should be undertaken by anybody working in general construction (commercial and civil) as well as those in the residential construction sector.



General induction training should include a formal training program that provides workers in the construction industry with an awareness and understanding of:

- their rights and responsibilities under health and safety law
- common hazards and risks that are in the construction industry
- basic risk management principles
- the standard of behaviour expected of workers on construction sites.



# ELEMENT 1 - IDENTIFY HEALTH AND SAFETY LEGISLATIVE REQUIREMENTS OF CONSTRUCTION WORK

**This element covers the following performance criteria:**

- 1.1. Basic roles, responsibilities and rights of duty holders are identified and explained according to jurisdictional health and safety legislative requirements.
- 1.2. Duty of care requirements are identified.
- 1.3. Construction safe work practices are identified and explained.

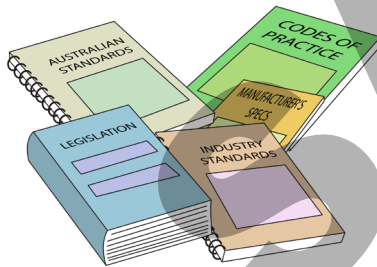




## 1.1 – Health & Safety Legislative requirements

### Laws to keep your workplace safe

Health and safety requirements are outlined in Acts, Regulations, Codes of Practice and Australian Standards.



#### Acts

**Acts** are laws that explain how to improve health and safety in the workplace. Check your state or territory regulator for the current version. For example: Model Work Health and Safety Act or Occupational Health and Safety Act.

#### Regulations

**Regulations** explain specific parts of the Act. For example: Part 4.3 – Confined spaces, Part 4.4 – Falls

#### Codes of Practice/Compliance Codes

**Codes of Practice** are practical guidelines on how to comply with (meet the rules of) legislation. For example: HAZARDOUS MANUAL TASKS Code of Practice

#### Australian Standards

**Australian Standards** are work guidelines that set the minimum accepted performance or quality for a specific hazard, process or product. For example: AS 2550 – Cranes, hoists and winches – safe use set.

## Examples of health and safety legislative requirements

- Duty of Care
- Construction industry health and safety standards and guidelines
- Licences, tickets or certificates of competency
- Health and safety officers/representatives, committees and supervisors
- National Code of Practice for Induction Training for Construction Work
- Health and safety, welfare and regulations
- Safety Codes of Practice.

It is important that you know about these legislative requirements and how they affect the work that you do.

These laws, regulations and guidelines are in place to make your worksite a safe place to work. They are there to **protect** you and the workers around you, and will help you understand your legal responsibility for health and safety.





## Licences, tickets or certificates of competency

Some tasks will require you to hold a current licence, certificate or other qualification. Here are some examples:

- Licences issued under the **National Standard for Licensing Persons Performing High Risk** work such as:

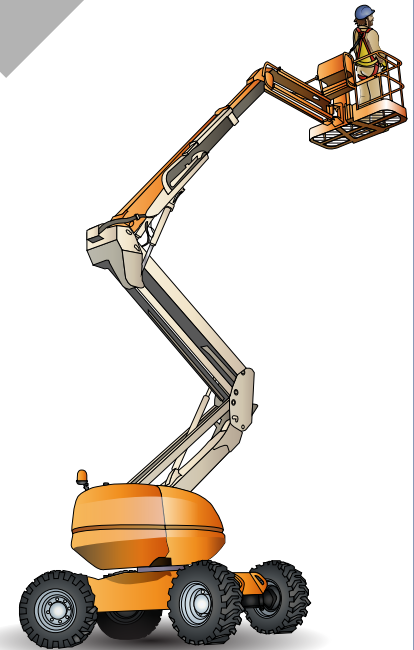
Dogging, rigging, scaffolding  
(over 4 metres)



Forklift trucks



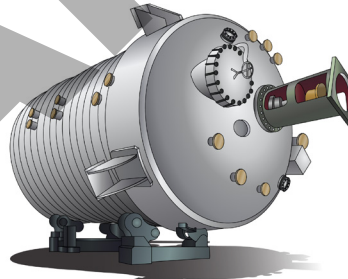
Elevating work platforms  
(boom length 11 metres or more)



Cranes



Pressure equipment





## 1.3 – Safe Work Practices

### Keeping yourself and others safe

As a worker on a construction site you are responsible for following safe work practices to maintain workplace health and safety standards. **It is important to follow safe work practices** so that you do not put yourself or others at risk.

- Workers must not place themselves or others at risk
- Workers must carry out tasks or use equipment according to any safety instruction
- Workers must co-operate with the PCBU/employer and follow all systems or procedures in the workplace to the extent necessary to allow compliance with the Act.

### Drugs and alcohol

Do not work while under the influence of illegal drugs and alcohol. Drugs and alcohol are **not** permitted at work.

Being under the influence of drugs and alcohol would endanger yourself and others.



# ELEMENT 2 - IDENTIFY CONSTRUCTION HAZARDS AND RISK CONTROL MEASURES

**This element covers the following performance criteria:**

- 2.1. Basic principles of risk management are identified.
- 2.2. Construction hazards are identified and discussed.
- 2.3. Purpose and use of PPE are identified and demonstrated.
- 2.4. Measures for controlling hazards are identified.





## 2.1 – Basic principles of risk management

### Hazard versus risk

#### What is the difference?

The constantly changing nature of construction work sets it apart from other types of work. Different hazards and risks emerge constantly—sometimes instantly.

Co-ordinating risk management is made more difficult by the stop and start nature of a construction project, high turnover of workers and temporary workplaces. These features contribute to the high levels of risk in the industry.

#### Hazard

A hazard is any thing or any situation which could injure or harm you.

In other words, it is anything that can hurt you.



#### Risk

A risk is the chance of a hazard causing injury or harm.

In other words, how likely it is that somebody or something may be harmed by the hazard.



## Identifying workplace hazards

A hazard is anything that can harm you or others while you are working. The first thing you need to do is to identify these hazards before you start work.

Take a good look at your workplace and decide if anything could possibly cause injury to you or anyone else in the area.



### Above head height

You should check above eye level for:

- Powerlines
- Buildings
- Trees
- Other obstructions.

### Ground to eye height

You should check around eye height for:

- Other equipment
- Machinery
- People
- Pedestrians
- Things in the path of travel
- Other obstructions.

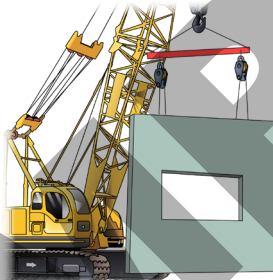


### Ground level (and below)

You should check the ground to see:

- If the surface is stable and level
- If there are spills or wet surfaces
- Is there debris/rubbish
- Is the surface strong enough to support the weight of any equipment or materials
- Are there trenches or recently backfilled trenches
- Is the ground unstable.

## Safe Work Method Statement (SWMS)

One way to identify construction workplace hazards is to use a Safe work method statement (SWMS). Safe work method statements are required to be completed by employers for high risk construction work such as:

<p>Working at heights</p> 	<p>Construction involving tilt-up or precast panels</p> 	<p>Trenching</p> 
<p>Working in a confined space</p> 	<p>Work involving explosives</p> 	<p>Working in areas of extreme heat or cold</p> 

Working at heights (continued)

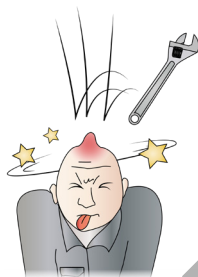
## Falling objects

Whenever working at heights there is an increased chance of falling objects causing severe injury or death.

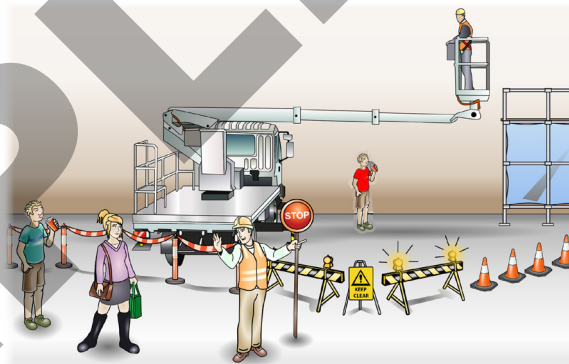
Erect and place appropriate signs warning of the dangers



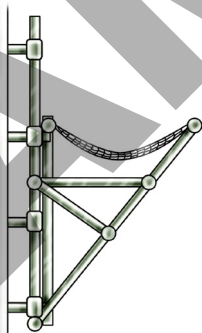
**WARNING**  
Falling objects



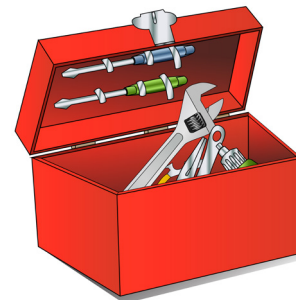
Fence or barricade off any areas below where you are working to prevent access.



Install a safety net on any scaffold to prevent tools or materials falling on people below.



Keep any tools in a toolbox when you are not using them.



## Hazardous substances and dangerous goods

While working on a construction site you will probably need to work with or near dangerous goods or substances.

These may include:

- Asbestos
- Dust
- Synthetic mineral fibres
- Chemicals and solvents

Sometimes hazardous substances can harm your health and have an affect on you many years after coming into contact with them.



## Asbestos

Commonly found around eaves, ceilings, wet areas, floor tiles, pipes and in some glues as well as around hot water pipes or structural steel. It is extremely dangerous and can cause harm many years after exposure.

Never try to handle or remove asbestos without training and appropriate personal protective equipment (PPE).

**Always report any indication of asbestos to your supervisor.**

In all states and territories an asbestos removalist must hold a licence before being permitted to remove friable asbestos containing material (ACM).

Some states and territories require a licence and notification for the removal of specified quantities of **ACM even if they are non-friable.**





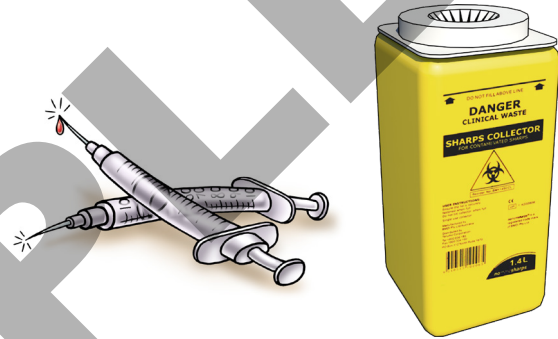
## HIV and other infectious diseases

### Transmission of infectious disease

This can occur if infected blood or bodily fluids splash in your eyes or onto broken skin (cuts or open sores).

Sharp instruments or needles that are contaminated with infectious disease can also cause infection if they penetrate the skin.

Some worksites conduct daily inspections for discarded needles.



### Protection

**Always** protect yourself if you are likely to come into contact with blood or bodily fluids. Wear gloves when applying first aid treatment.

Make sure any contaminated materials are disposed of correctly.



## Hot and cold working environments

You may be required to work in an environment that is uncomfortably hot or cold.

### Hot environment

When working in a hot environment (out in the sun or near hot equipment or plant) it is important you take steps to avoid any heat related illnesses such as:

- Heat cramp
- Heat exhaustion
- Heat stroke (life threatening).

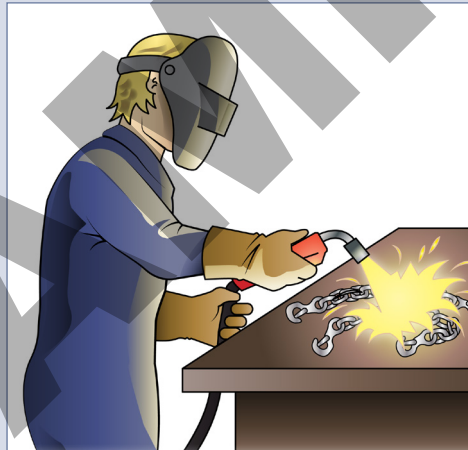


### Ultraviolet (UV) radiation

If you have to work in the sun, under high intensity lights or next to welding flashes, ultraviolet (UV) radiation can harm you.

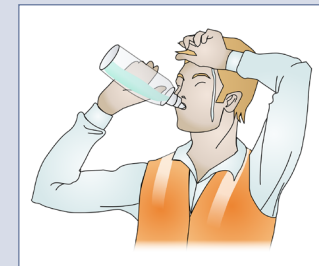
It can burn your skin (sunburn) and/or damage your eyes.

Wear appropriate PPE when welding or working with lasers.



### Dehydration

It is also important to keep drinking water while you work to help prevent dehydration.



## Noise

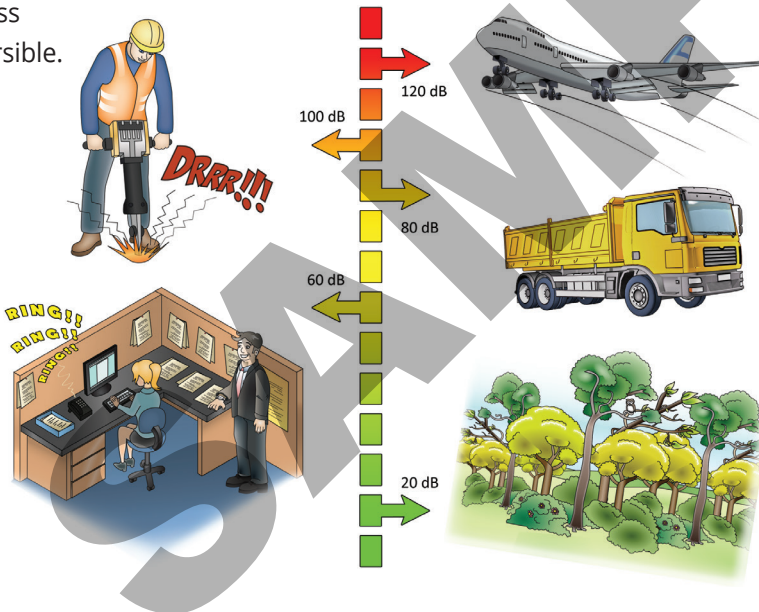
Noise which is usually caused by heavy vehicles and equipment can damage your hearing permanently.

### Decibel levels of common sounds

8 hours of noise at 85db or noise levels of 140db even briefly can permanently damage your hearing.

Hearing loss is:

- slow
- painless
- irreversible.



### Hearing protection

You should wear hearing protection like ear plugs or ear muffs whenever there is noise that could contribute to the loss of hearing.



## Manual handling

Manual handling is any activity where you use force to:

- lift
- lower
- push
- pull
- carry or
- move a load.

Any manual handling activity that is done incorrectly can result in injuries such as muscle strain and back and neck injuries.



Before you start any manual handling activity check to see if there are any mechanical aids or equipment that you can use to make the job safer and easier.



If the load is big, heavy or an awkward shape get someone to help you move it.

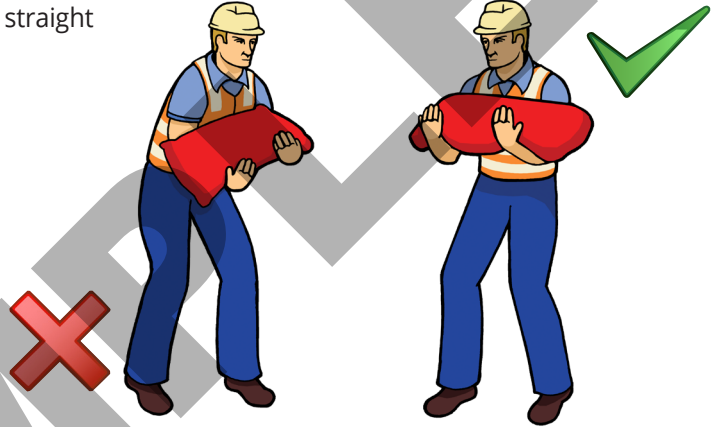


# Manual lifting

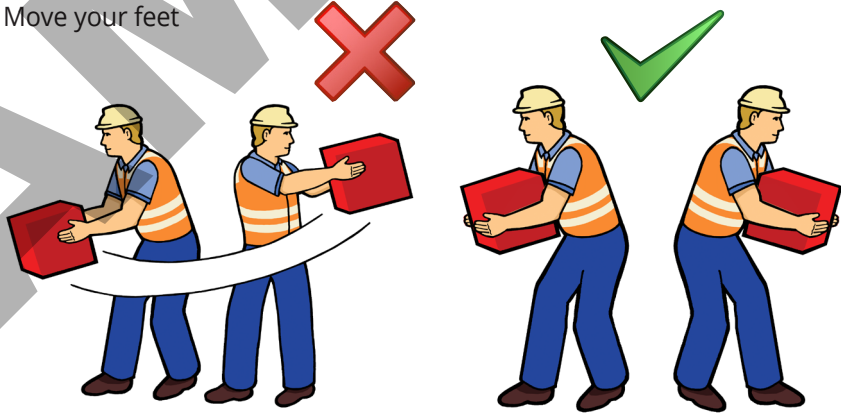
Bend your legs and keep your back straight



Keep your back straight

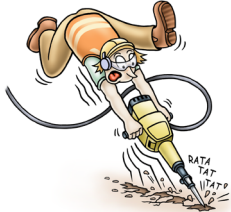


Move your feet

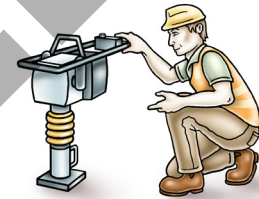


## Plant and equipment

Only use plant and equipment you are trained and licensed to use and only use it for the type of work it was designed to do. Misusing equipment can lead to some serious consequences.



Before you use any plant or equipment make sure it is safe to use and has been properly serviced and checked by an experienced and qualified person.



If you find any plant or equipment that is unsafe, tag it and isolate it to make sure nobody uses it.

The person who attached the danger tag must remove the tags when the machine/equipment has been repaired. In the event of an illness a tag may be removed by the supervisor, once you have made sure of the safety of all people.



Make sure you follow correct procedures when parking, storing and isolating equipment.



## 2.3 – Personal Protective Equipment (PPE)

### The most common form of risk minimisation

Personal protective equipment (PPE) provides you with basic protection from hazards. It is not a guarantee that it will prevent injury, but it should help.

It is up to your employer to provide the necessary PPE for you to operate safely and also to make sure that you are trained to fit and use it properly. Look for safety signs around your worksite to show you when you need to wear different types of PPE.

It is a condition of entry on some construction sites that you wear specific PPE.



**BREATHING APPARATUS  
MUST BE WORN  
IN THIS AREA**



**EYE  
PROTECTION  
MUST BE WORN**



**FOOT  
PROTECTION  
MUST BE WORN**



**HEARING  
PROTECTION  
MUST BE WORN**



**HAND  
PROTECTION  
MUST BE WORN**



**DUST MASK  
MUST BE WORN**



**HEAD  
PROTECTION  
MUST BE WORN**

## Personal Protective Equipment (PPE)

The best way to make the workplace safe is to take away hazards altogether. But often you can't do this. This is where Personal Protective Equipment (PPE) can help.

PPE is clothing or equipment worn on the body to help protect you from hazards. PPE will not take away the risk of harm altogether, but it will help keep you safe.

Here are some examples of PPE:





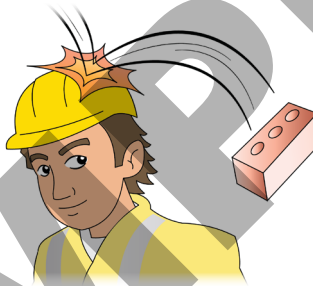
## PPE examples

These are examples of how personal protective equipment can protect you and your work mates.

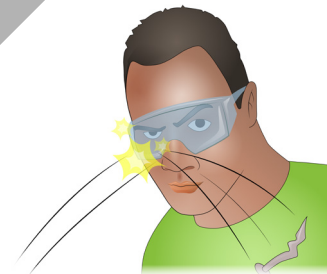
**Safety shoes** or **boots** should be worn. It is important that your footwear is safe and the right type for the work you do and the conditions you work in.



**Safety helmet** or **hard hat** can protect your head from falling objects.



**Safety glasses, goggles** or a **face shield** can protect your eyes from harmful objects.



**Respiratory equipment** or a **dust mask** can stop you from breathing in harmful substances such as gasses, dust or other contaminants.



**Earmuffs** or **earplugs** should be worn whenever there is a chance of noise causing loss of hearing.



**Safety gloves** should be worn to help prevent cuts, burns, vibratory injuries or hazardous materials getting into your body through your skin.

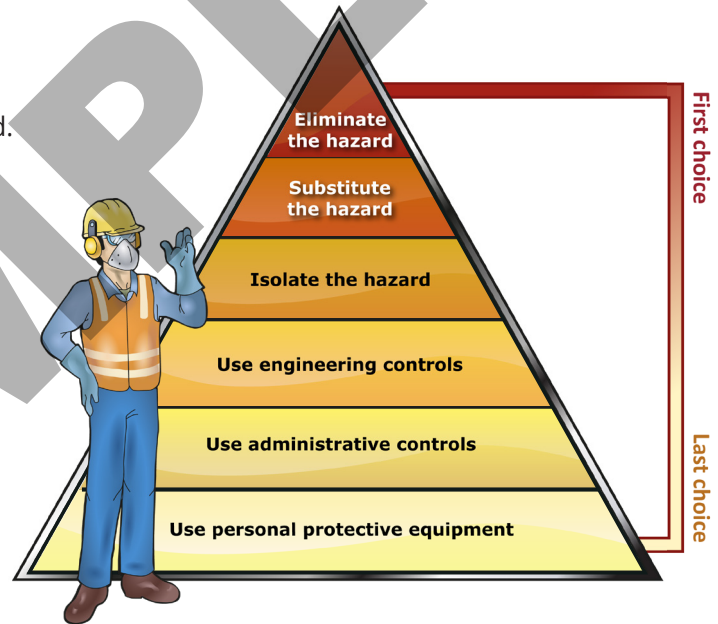


## The Hierarchy of Hazard Control

The **Hierarchy of Hazard Control** is a list of controls that you can use to eliminate or lower the danger from a hazard in the workplace.

There are the six (6) levels in the hierarchy from the **first choice** to the **last choice**.

- 1. Elimination:**  
If possible, remove (take away) the hazard.
- 2. Substitution:**  
Use a safer method if you can't remove the hazard.
- 3. Isolation:**  
Stop access to the hazardous (dangerous) area.
- 4. Engineering control measures:**  
Change the tools, equipment or environment to make it safer.
- 5. Administrative practices:**  
Reduce the time the worker is exposed to the hazards by using training, job rotation, the timing of jobs, etc.
- 6. Personal Protective Equipment (PPE):**  
Use PPE as your last line of defence.



Memory aid: **Every Saturday I Eat A Pie**

## How to remember the hierarchy of hazard control

You can use the following acronym to help you remember the steps in the hierarchy of hazard control.

**E** Every  
Eliminate

**S** Saturday  
Substitute

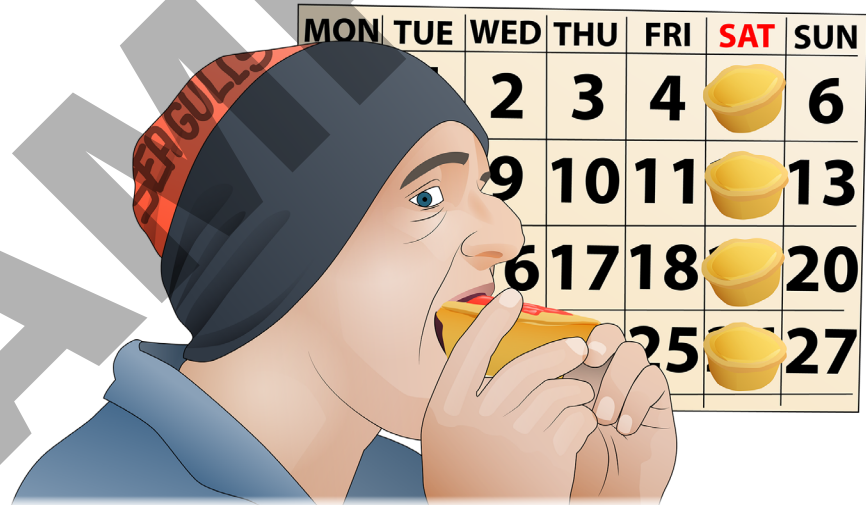
**I** I  
Isolate

**E** Eat  
Engineering

**A** a  
Administration

**P** Pie  
PPE

# Every Saturday I Eat a Pie



Six control measures in the hierarchy of hazard control (continued)

## 4. Engineering

This is where equipment and work processes are improved through engineering solutions to reduce risk.

It may include installing safety features on equipment like guards, automatic cut-outs or ventilation in areas where air-flow is restricted.

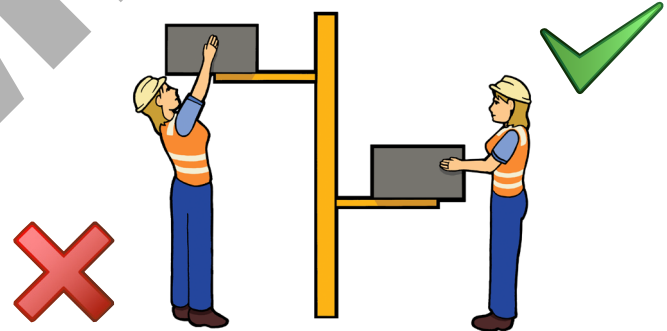


## 5. Administration

Administrative measures are used to limit the risk. This is where policies, rules or changes to the way a company and workers operate can reduce risks.

It may include:

- Restructuring breaks and employee tasks
- Reducing the amount of time workers are exposed to a hazard
- Using signs to make people aware of a hazard
- Having emergency procedures in place
- Training to work in a safer way.



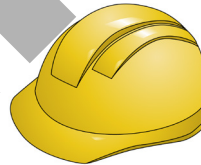
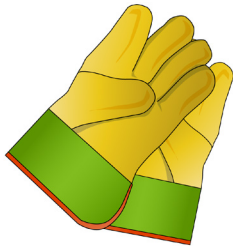
A risk assessment must be carried out to determine if the object can be lifted safely.

Six control measures in the hierarchy of hazard control (continued)

## 6. Personal Protective Equipment (PPE)

The previous steps may not have completely removed the risk. PPE can be used as a last resort or with other control measures. PPE is your last line of defence.

PPE is at the lowest stage of the Hierarchy of control. It should rarely be used alone to control a risk.



## Reviewing the action you have taken

Once you have applied hazard controls to lower the risk of harm, you need to review how effective the control is and if more needs to be (or can be) done to lower the risk further.

You may need to apply more than one control measure to reduce the risk to a minimal level.



## Risk assessment management plan

In making a risk assessment management plan you should include the following:

- Identify the hazard
- Assess how likely it is that the hazard will cause harm
- Talk to other workers or health and safety people to find ways to control the hazard
- Talk to other workers or health and safety people to lower the risk
- Finally, are there ways to improve things for the future?

Risk assessment and control form					
Workplace area or building		Reference no.			
Form completed by		Date form completed			
Signature					
Hazard identification					
Hazard					
Associated risk					
Specific circumstances relating to the risk					
Priority of risk					
Risk assessment					
Likelihood of loss	Amount certain	Unlikely	Possible	Unlikely	Rare
Consequences of loss	Catastrophic	Major	Moderate	Minor	Insignificant
Risk control					
Possible control options:					
Elimination					
Substitution, isolation or engineering					
Administrative or PPE					
Preferred control options and why					
Implementation plan					
Control option	Associated activities	Resources required	Personnel responsible	Implementation date	Sign off and review date
Are control measures in place? <input type="checkbox"/> Yes <input type="checkbox"/> No, why not?					
Are controls preventing or minimising the risk? <input type="checkbox"/> Yes <input type="checkbox"/> No, why not?					
Are there any new problems with the risk? <input type="checkbox"/> Yes <input type="checkbox"/> No, why are they?					

Always re-assess the level of risk after you introduce a control measure. If you are unsure about what other hazard controls can be applied, talk to your health and safety representative or your supervisor.

## Risk assessment – putting it all together

Shown here is an example of a Risk assessment and control form that you may use in your workplace to help with risk management.

For more information about risk management refer to the Risk Management Code of Practice.

Workplace area or grouping: .....		Reference no: .....				
Form completed by: .....		Date form completed: .....				
Signature: .....						
<b>Hazard Identification</b>						
Hazard: .....						
Associated risk: .....						
Specific circumstances relating to the risk: .....						
Persons at risk: .....						
<b>Risk Assessment</b>						
Existing control measures (if any): Staff follow policy and operating instructions to use the mixer safely.						
Likelihood: <input type="checkbox"/> Almost certain <input type="checkbox"/> Likely <input type="checkbox"/> Possible <input type="checkbox"/> Unlikely <input type="checkbox"/> Rare						
Consequences: <input type="checkbox"/> Catastrophic <input type="checkbox"/> Major <input type="checkbox"/> Moderate <input type="checkbox"/> Minor <input type="checkbox"/> Insignificant						
<b>Risk Control</b>						
Possible control options: .....						
Elimination: .....						
Substitution, Isolation or Engineering: .....						
Administrative or personal protective equipment: .....						
Preferred control options (and why): .....						
<b>Implementation Plan</b>						
<i>Control option</i>	<i>Associated activities</i>	<i>Resources required</i>	<i>Person(s) responsible</i>	<i>Proposed implementation date</i>	<i>Sign off and date</i>	<i>Scheduled review date</i>
<b>Review</b>						
Are control measures in place? <input type="checkbox"/> Yes <input type="checkbox"/> No    Why not? .....						
Are controls preventing or minimising the risk? <input type="checkbox"/> Yes <input type="checkbox"/> No    Why not? .....						
Are there any new problems with the risk? <input type="checkbox"/> Yes <input type="checkbox"/> No    What are they? .....						

# ELEMENT 3 - IDENTIFY HEALTH AND SAFETY COMMUNICATION AND REPORTING PROCESSES

**This element covers the following performance criteria:**

- 3.1. Health and safety documents are identified and discussed.
- 3.2. Roles of designated health and safety personnel are identified and explained.
- 3.3. Safety signs and symbols are identified and explained.
- 3.4. Procedures for reporting hazards, incidents and injuries are identified.







## 3.1 – Health and safety documents

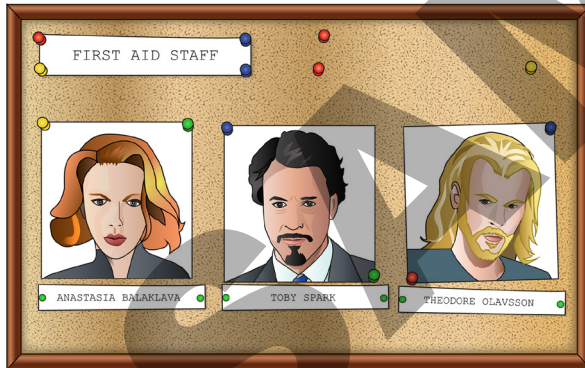
### Health and safety information

#### Ways to find out about and/or raise health and safety issues

The best place to get health and safety information is from your health and safety representative or committee. Talk to your health and safety representative if you have any concerns or if you see a problem that needs to be fixed. Other ways to find out health and safety information, or to contribute your own are:

#### Written notices

Reading or writing health and safety notices, newsletters, meeting minutes and bulletins.



#### Meetings

For example, health and safety committee meetings and toolbox talks.



Health and safety reports and forms (continued)

## Job Safety and Environment Analysis (JSEA)

A Job Safety and Environment Analysis (JSEA) worksheet is used to record your work plan. This includes the details of the job, any hazards associated with the job or worksite and the hazard control measures that you are going to put into place. A JSEA also outlines who is responsible at each stage of the job for putting control measures in place.

Shown here is an example of what a JSEA worksheet might look like.

<b>Job Safety and Environment Analysis Worksheet</b>			
Company name: <input type="text"/>		Date: <input type="text"/>	JSEA No. <input type="text"/>
Site name: <input type="text"/>		Permit to work requirement: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Contractor: <input type="text"/>		Approved by: <input type="text"/>	
Activity: <input style="width: 100%; height: 40px;" type="text"/>			
Activity	Hazards	Risk control measures	Who is responsible?
List the tasks needed to do the job in the order they are done.	Next to each task list the hazards that could cause injury when the task is done.	List the control measures needed to remove or minimise the risk of injury from the hazard you have identified.	Write the name of the person responsible (supervisor or above) for putting the control measures in place.



## 3.3 – Safety signs and symbols




### Safety signs and symbols

There are lots of different safety signs and symbols at any worksite. These signs are important because they can let you know if there is a hazard or if there are any special requirements on the worksite. You must follow any instructions on the signs — they have been posted to keep you safe.



Australian Standards for safety signs have standard colours, designs, shapes and sizes. These safety signs fit into four (4) different groups as shown in these tables.

**Safety signs and symbols are instructions you MUST follow**

#### 1. Regulatory signs

Description	Prohibition signs	Mandatory signs	Limitation or restriction signs
Example:	No smoking  <b>NO SMOKING</b>	Safety helmet must be worn  <b>SAFETY HELMET MUST BE WORN</b>	Speed limit is 50 kilometres per hour  <b>50 AREA</b>

Safety signs and symbols (continued)

2. Emergency information		3. Fire signs	
<b>Description</b>	<p><b>Green</b> in colour</p> <p>These signs <b>identify directions</b> to find exits, first aid facilities and equipment.</p>	<b>Description</b>	<p><b>Red</b> in colour</p> <p>These signs <b>identify where to find</b> fire-fighting equipment, alarms and exits.</p>
Example:	<p>First Aid facility</p> 	Example:	<p>Fire extinguisher</p> 

# ELEMENT 4 - IDENTIFY INCIDENT AND EMERGENCY RESPONSE PROCEDURES

**This element covers the following performance criteria:**

- 4.1. Procedures for responding to incidents and emergencies are identified and explained.
- 4.2. Procedures for accessing first aid are identified.
- 4.3. Types and purpose of fire safety equipment are identified and discussed.



Procedures for incident response (continued)

## Three things you must do in any emergency

### 1. Remain calm



### 2. Warn others (raise alarm)



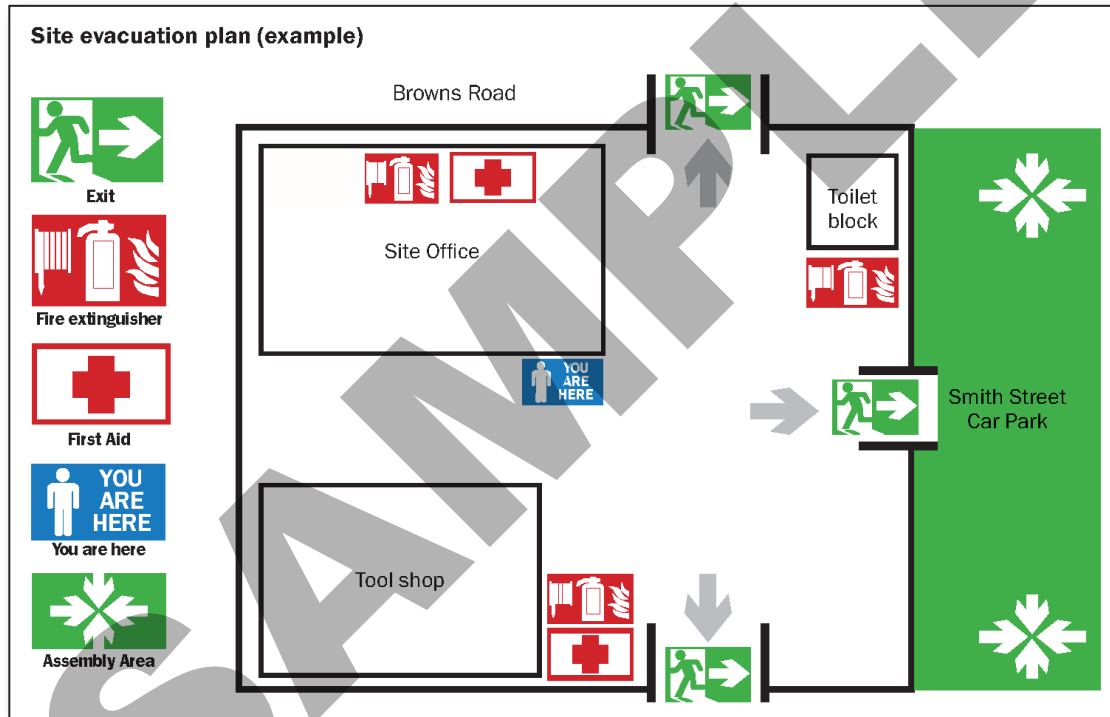
### 3. Get help

— other workers, first aid officer, supervisor, health and safety representative and emergency services.



## Evacuation

You may be required to evacuate the area. There will be set areas for you to assemble around your worksite. Workplaces should have site emergency plans and documentation clearly displayed.



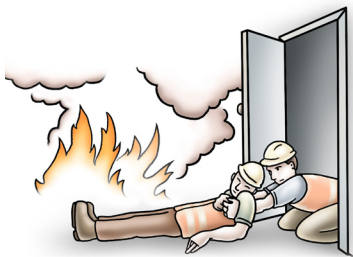
Talk to your health and safety representative for more information on emergency procedures at your workplace.

Types of emergencies (continued)

Shown here is an example of an emergency procedure for dealing with a fire:

## Fire orders

1. Assist any person in immediate danger — if safe to do so.



2. Close the door.



3. Call the Fire Brigade on **000**.



4. Put out the fire if safe to do so.



5. Evacuate to the assembly area.



6. Remain in the assembly area and make sure everybody is accounted for.







## 4.2 – First Aid

### Quick response

#### A quick response can be the difference between life and death

If somebody is injured and needs first aid you should give assistance if safe to do so and call a person qualified to give first aid.

In the case of a serious injury, it is best not to move the injured person. Moving an injured person may cause further harm.

If it is safe to stay in the area, it is best to wait until an ambulance arrives.



### DRS ABCD action plan

In any emergency situation, it is important to apply the **DRS ABCD** action plan.

1. **Danger**
2. **Response**
3. **Send for help**
4. **Airway**
5. **Breathing**
6. **Cardiopulmonary Resuscitation (CPR)**
7. **Defibrillation**



Your PCBU/employer must provide first aid kits at your worksite.

Any first aid being given should be recorded as part of the incident report.

A sign should show the location of the first aid kit.


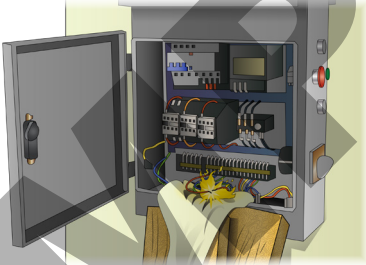
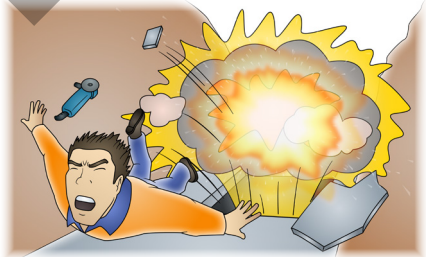
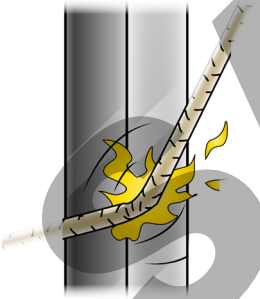






## 4.3 – Fire safety equipment

### Different fires need different equipment

Common causes of fire on a construction site include:

<p>Chemicals</p> 	<p>Electrical</p> 	<p>Explosion</p> 
<p>Friction</p> 	<p>Flammable materials</p> 	<p>Mechanical equipment and welding</p> 

## Fire extinguishers

Shown on the next two pages are common types of fire extinguishers that may be on a worksite and the types of fires they should be used for.

Fire extinguishers are generally designed for one or more classes.

Commonly available are:

- A** - Water
- BC** - Carbon dioxide
- ABC** - Dry powder



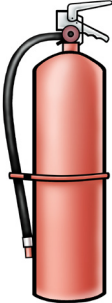


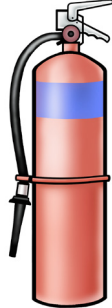
**Note:**  
Fire extinguishers should be regularly inspected, tested and maintained.



**You must use different types of fire extinguishers and other firefighting equipment depending on what has caused or fuelled the fire.**

Fire extinguishers (continued)

## Different types of fire extinguishers

Extinguisher type	Label	Colour	Current
<p><b>Water</b></p> <p>Water extinguishers are efficient and cost-effective against Class A fires involving paper, textiles, wood, plastics and rubber.</p>	 <p>THIS EXTINGUISHER <b>WATER</b> TO BE USED FOR WOOD, PAPER, RUBBISH FIRES</p> <hr/> <p>NOT FOR ELECTRICAL OR FLAMMABLE LIQUID FIRES</p>		
<p><b>Foam</b></p> <p>These extinguishers contain a concentrate mixed with water which produces foam when discharged. Foam extinguishers are effective against Class A &amp; B fires involving paper, textiles, wood, plastics, rubber, petrol, oil and paints. The foam provides a blanket covering when utilised on flammable liquid or carbonaceous fires assisting with the exclusion of oxygen and thus reducing the ability of fuel to continue burning.</p>	 <p>THIS EXTINGUISHER <b>FOAM</b> TO BE USED FOR OIL AND FLAMMABLE LIQUID FIRES</p> <hr/> <p>NOT FOR ELECTRICAL FIRES</p>		

## Fire blankets

Fire blankets are fire-resistant sheets of glass-fibre material. They are used to cover a fire to cut off the supply of oxygen or to wrap a person whose clothes are on fire.



An example of a fire blanket sign

## Breathing apparatus

Breathing apparatus sets are breathing kits designed to give you clean, breathable air (from a tank). They are designed for use in poor air due to low oxygen, smoke, gasses or contaminants.



An example of a breathing apparatus sign

## Element 4 Summary



- ✓ In an emergency you should:
  1. Keep calm.
  2. Warn others.
  3. Get help.
- ✓ Do not try to give first aid unless you are qualified.
- ✓ Different fire extinguishers are designed to combat different types of fires.
- ✓ When contacting emergency services you should let them know:
  - what the emergency is
  - where it is happening/has happened
  - what action has been taken so far
  - if anybody is hurt
  - if you have already contacted other emergency service
  - your name and contact details.

# TEST YOURSELF - LEARNING TASKS

Check your knowledge of each chapter by answering the questions on the following pages.

**Your trainer will check your answers.**

**Your trainer may remove the following pages as a record of evidence of training.**



## ELEMENT 1 REVIEW QUESTIONS

**QUESTION 1 (PC 1.1)**

List three (3) examples of Workplace Health and Safety legislation.

1.

2.

3.



## ELEMENT 2 REVIEW QUESTIONS

**QUESTION 20 (PC 2.2)**

Check the safe working distances for powerlines in your state or territory.

How many metres is the **NO GO ZONE** for **distribution lines on poles**?

**QUESTION 21 (PC 2.3)**

Why should you wear hearing protection on a noisy construction site?