HLTAID011 Provide First Aid Candidate Learning Guide



HLTAID011 - Provide First Aid

Candidate Learning Guide

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Your Learning Guide

Welcome to your self-paced learning guide. This learning guide has been designed to lead you through a range of experiences to enable you to become an independent learner.

Independent learning means that you will choose the level and pace of your own education and training.

A learning guide is a guide to help you learn. A learning guide is *not* a text book.

Your learning guide will:

- describe the skills you need to demonstrate to achieve competency for this unit
- provide information and knowledge to help you develop your skills
- provide a wide range of structured learning activities to help you absorb knowledge and information and practice your skills
- direct you to other sources of additional knowledge and information about topics for this unit

To use your learning guide effectively, work through each of the sections in the order provided.

Throughout each section in your candidate guide, there are exercises and activities that will help your understanding of the competencies required for the completion of this Unit.

What are competencies?

The broad concept of competency relates to the ability to perform particular tasks and duties to the standard of performance expected in the workplace. Competency requires the application of specified skills, knowledge, and attitudes relevant to effective participation in an industry, industry sector or enterprise. The intended learning outcomes address the competencies required for the successful completion of this unit. Your learning guide has been developed in alignment with the National Training Package, HLT Health

How does this resource relate to the National Training Package, HLT?

This learning guide has been written to address the National Training Package unit **HLTAID011 – Provide First Aid.** Each section relates to the elements, performance criteria and the skills and knowledge required for this unit of competence.

Progress Checklist

Use the progress checklist to chart your progress through this candidate guide. Indicate that you have completed each Learning Assessment Activity or Knowledge Evidence Checkpoint, as you progress through your learning guide.

Portfolio Guidelines

Throughout your learning guide you will be asked to complete Learning Activities which require you to include information in a portfolio.

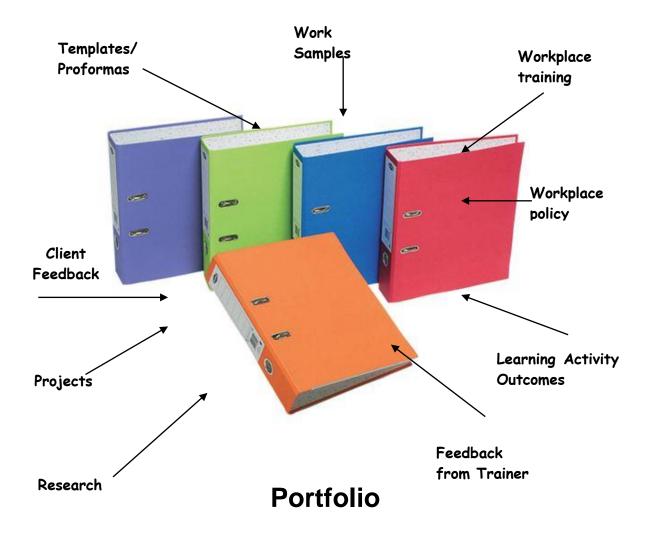
What is a Portfolio?

The term 'portfolio' describes a means of keeping a record of development to analyse and evaluate learning and practice. Your portfolio will include a range of evidence.

Compiling your Portfolio

The first step is to either buy a portfolio or make your own with an A4 ring binder file. Or you may choose to develop an e-portfolio.

As you work though the activities in the teaching materials, clear guidance is given about the mandatory portfolio content. It is for you to decide what additional evidence you want to include. The diagram below contains some suggestions about other possible sources of evidence.



Organising your Portfolio Structure

There is no right or wrong way to complete your portfolio, as it should be designed to suit you. However, the contents must be organised in such a way that you can find all of the information easily. It might be a good idea to use the Progress Checklist (at the front of this learning guide) as a Table of Contents and place all of the evidence you collect in the order shown on this checklist.

The information gathered from each Activity should be placed in the portfolio immediately so that you do not misplace it. Do not wait until you have finished a Section to add it to the portfolio or you will waste time trying to sort it all out. Start today and move forwards.

You might wish to use dividers to separate the contents, if required, grouping evidence into areas of learning.

Finally

Everything you do during this unit is evidence of your competence, so don't destroy anything – place it in your portfolio!

HLTAID011 - Provide First Aid

Application:

This unit describes the skills and knowledge required to provide a first aid response to a casualty in line with first aid guidelines determined by the Australian Resuscitation Council (ARC) and other Australian national peak clinical bodies.

The unit applies to all persons who may be required to provide a first aid response in a range of situations, including community and workplace settings.

Specific licensing/regulatory requirements relating to this competency, including requirements for refresher training should be obtained from the relevant national/state/territory Work Health and Safety Regulatory Authorities.

Introduction

As a worker, a trainee, or a future worker you want to enjoy your work and become known as a valuable team member. This unit of competency will help you acquire the knowledge and skills to work effectively as an individual and in groups. It will give you the basis to contribute to the goals of the organisation which employs you.

It is essential that you begin your training by becoming familiar with the industry standards to which organisations must conform.

This unit of competency introduces you to some of the key issues and responsibilities of workers and organisations in this area. The unit also provides you with opportunities to develop the competencies necessary for employees to operate as team members.

This Learning Guide covers:

- Responding to an emergency situation
- Applying appropriate first aid procedures
- · Communicating details of the incident
- Reviewing the incident

Learning Program

As you progress through this unit you will develop skills in locating and understanding an organisations policies and procedures. You will build up a sound knowledge of the industry standards within which organisations must operate. You should also become more aware of the effect that your own skills in dealing with people has on your success, or otherwise, in the workplace.

Knowledge of your skills and capabilities will help you make informed choices about your further study and career options.

Additional Learning Support

To obtain additional support you may:

- Search for other resources in the Learning Resource Centres of your learning institution. You may find books, journals, videos and other materials which provide extra information for topics in this unit.
- Search in your local library. Most libraries keep information about government departments and other organisations, services and programs.
- Contact information services such as the Equal Opportunity Commission, and Commissioner of Workplace Agreements. Union organisations, and public relations and information services provided by various government departments. Many of these services are listed in the telephone directory.
- Contact your local shire or council office. Many councils have a community development or welfare officer as well as an information and referral service.
- Contact the relevant facilitator by telephone, email or mail.

Facilitation

Your training organisation will provide you with a flexible learning facilitator.

Your facilitator will play an active role in supporting your learning, will make regular contact with you and if you have face to face access, should arrange to see you at least once. After you have enrolled your facilitator will contact you by telephone or letter as soon as possible to let you know:

- How and when to make contact;
- What you need to do to complete this unit of study;
- What support will be provided;
- Here are some of the things your facilitator can do to make your study easier;
- Give you a clear visual timetable of events for the semester or term in which you are enrolled, including any deadlines for assessments;
- Check that you know how to access library facilities and services;
- Conduct small 'interest groups' for some of the topics;
- Use 'action sheets' and website updates to remind you about tasks you need to complete;
- Set up a 'chat line". If you have access to telephone conferencing or video conferencing, your facilitator can use these for specific topics, or discussion sessions:
- Circulate a newsletter to keep you informed of events, topics, and resources of interest to you;

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Keep in touch with you by telephone or email during your studies.

Flexible Learning

Studying to become a competent worker and learning about current issues in this area, is an interesting and exciting thing to do. You will establish relationships with other candidates, fellow workers, and clients. You will also learn about your own ideas, attitudes, and values. You will also have fun – most of the time.

At other times, study can seem overwhelming and impossibly demanding, particularly when you have an assignment to do and you aren't sure how to tackle it.....and your family and friends want you to spend time with them.....and a movie you want to watch is on television....and.... Sometimes being a candidate can be hard.

Here are some ideas to help you through the hard times. To study effectively, you need space, resources, and time.

Space

Try to set up a place at home or at work where:

- You can keep your study materials;
- You can be reasonably quiet and free from interruptions, and;
- You can be reasonably comfortable, with good lighting, seating, and a flat surface for writing;
- If it is impossible for you to set up a study space, perhaps you could use your local library. You will not be able to store your study materials there, but you will have quiet, a desk and chair, and easy access to the other facilities.

Study Resources

The most basic resources you will need are:

- a chair;
- a desk or table;
- a reading lamp or good light;
- a folder or file to keep your notes and study materials together;
- materials to record information (pen and paper or notebooks, or a computer and printer);
- reference materials, including a dictionary

Do not forget that other people can be valuable study resources. Your fellow workers, work supervisor, other candidates, your flexible learning facilitator, your local librarian, and workers in this area can also help you.

Time

It is important to plan your study time. Work out a time that suits you and plan around it. Most people find that studying in short, concentrated blocks of time (an hour or two) at regular intervals (daily, every second day, once a week) is more effective than trying to cram a lot of learning into a whole day. You need time to "digest" the information in one section before you move on to the next, and everyone needs regular breaks from study to avoid overload. Be realistic in allocating time for study. Look at what is required for the unit and look at your other commitments.

Make up a study timetable and stick to it. Build in "deadlines" and set yourself goals for completing study tasks. Allow time for reading and completing activities. Remember that it is the quality of the time you spend studying rather than the quantity that is important.

Study Strategies

Different people have different learning 'styles'. Some people learn best by listening or repeating things out loud. Some learn best by 'doing', some by reading and making notes. Assess your own learning style, and try to identify any barriers to learning which might affect you. Are you easily distracted? Are you afraid you will fail? Are you taking study too seriously? Not seriously enough? Do you have supportive friends and family? Here are some ideas for effective study strategies:

Make notes. This often helps you to remember new or unfamiliar information. Do not worry about spelling or neatness, as long as you can read your own notes. Keep your notes with the rest of your study materials and add to them as you go. Use pictures and diagrams if this helps.

Underline key words when you are reading the materials in this learning guide. (Do not underline things in other people's books.) This also helps you to remember important points.

Talk to other people (fellow workers, fellow candidates, friends, family, your facilitator) about what you are learning. As well as helping you to clarify and understand new ideas, talking also gives you a chance to find out extra information and to get fresh ideas and different points of view

Using this learning guide:

A learning guide is just that, a guide to help you learn. A learning guide is not a text book. This learning guide will

- describe the skills you need to demonstrate to achieve competency for this unit;
- provide information and knowledge to help you develop your skills;
- provide you with structured learning activities to help you absorb the knowledge and information and practice your skills;
- direct you to other sources of additional knowledge and information about topics for this unit.

The Icon Key



Key Points

Explains the actions taken by a competent person.



Example

Illustrates the concept or competency by providing examples.



Learning Assessment

Provides learning assessment activities to reinforce understanding of the action. This is called formative assessment

Formative assessment

The goal of formative assessment is to monitor your learning to provide ongoing feedback that can be used by your trainer to improve their teaching and so you can improve your learning. More specifically, formative assessments:

- help you identify your strengths and weaknesses and target areas that need work
- help your trainer recognise where you are struggling and address problems immediately



Chart

Provides images that represent data symbolically. They are used to present complex information and numerical data in a simple, compact format.



Intended Outcomes or Objectives

Statements of intended outcomes or objectives are descriptions of the work that will be done. These are also known as your Performance Criteria



Assessment

Strategies with which information will be collected in order to validate each intended outcome or objective. This is called summative assessment.

Summative assessment

The goal of summative assessment is to *evaluate your learning* at the end of an instructional (learning) unit by comparing it against some standard or benchmark.



Case Studies

Documented study of a specific real-life situation or imagined scenario



Knowledge Evidence Checkpoint

Specifies what the individual must know in order to safely and effectively perform the work task described in the unit of competency;

The type and depth of knowledge required to meet the demands of the unit of competency



Performance Evidence Checkpoint

Specifies the skills to be demonstrated relevant to the product and process

The frequency or volume of the product or process

ARC/ANZCOR Guidelines



The following ARC/ANZCOR guidelines are included in your resources folder and should be referenced as you progress through this unit of competency. (File: ANZCOR ARC GUIDELINES – LEARNER)

ANZCOR Guideline 2 - Managing an Emergency - August 2016 (0.1 MiB)

ANZCOR Guideline 3 - Recognition and First Aid Management of the Unconscious Victim - January 2016 (0.1 MiB)

ANZCOR Guideline 4 - Airway - January 2016 (0.3 MiB)

ANZCOR Guideline 5 - Breathing - January 2016 (0.2 MiB)

ANZCOR Guideline 6 - Compressions - January 2016 (0.5 MiB)

ANZCOR Guideline 7 - External Automated Defibrillation in Basic Life Support - January 2016 (0.2 MiB)

ANZCOR Guideline 8 - Cardiopulmonary Resuscitation - January 2016 (0.3 MiB)

ANZCOR Guideline 9.1.1 – First Aid for Management of Bleeding - July 2017 (0.4 MiB)

ANZCOR Guideline 9.1.3 - Burns - January 2016 (0.1 MiB)

ANZCOR Guideline 9.1.4 - Head Injury - January 2016 (0.1 MiB)

Guideline 9.1.5 - Harness Suspension Trauma - First Aid Management - July 2009 (30 KiB)

ANZCOR Guideline 9.1.6 - Management of Suspected Spinal Injury - January 2016 (0.1 MiB)

ANZCOR Guideline 9.1.7 - First Aid Management of a Crushed Victim - November 2019 (0.3 MiB)

ANZCOR Guideline 9.2.1 - Recognition and First Aid Management of Heart Attack - August 2016 (0.2 MiB)

ANZCOR Guideline 9.2.2 - Stroke - August 2016 (0.2 MiB)

ANZCOR Guideline 9.2.3 - Shock - November 2019 (0.2 MiB)

Guideline 9.2.4 - First Aid Management of a Seizure - November 2014 (57 KiB)

ANZCOR Guideline 9.2.5 - First Aid for Asthma - November 2016 (0.3 MiB)

ANZCOR Guideline 9.2.7 – First Aid Management of Anaphylaxis - August 2016 (0.1 MiB)

Guideline 9.2.8 - The First Aid Management of Hyperventilation Syndrome - November 2008 (30 KiB)

ANZCOR Guideline 9.2.9 – First aid Management of a Diabetic Emergency - November 2017 (0.3 MiB)

ANZCOR Guideline 9.2.10 - The Use of Oxygen in Emergencies - January 2016 (0.1 MiB)

ANZCOR Guideline 9.2.11 - First Aid Management of the Agitated Person - November 2020 (0.3 MiB)

Guideline 9.3.2 - Resuscitation of the Drowning Victim - March 2014 (82 KiB)

Guideline 9.3.3 - Hypothermia: First Aid and Management - February 2009 (46 KiB)

ANZCOR Guideline 9.3.4 - Heat Induced Illness (Hyperthermia) - September 2020 (0.3 MiB)

Guideline 9.3.5 - Resuscitation of divers who have used compressed gas - November 2011 (58 KiB)

Guideline 9.3.6 - Cold Injury - March 2000 (27 KiB)

ANZCOR Guideline 9.4.1- Australian Snake Bite - March 2020 (0.3 MiB)

Guideline 9.4.2 - Spider Bite - July 2014 (44 KiB)

ANZCOR Guideline 9.4.3 - Tick Bites and Bee, Wasp and Ant Stings - August 2016 (0.1 MiB)

Guideline 9.4.5 - Jellyfish Stings - July 2010 (43 KiB)

Guideline 9.4.6 - Blue-Ringed Octopus and Cone Shell - July 2014 (36 KiB)

Guideline 9.4.7 - Envenomation - Fish Stings - July 2014 (38 KiB)

Guideline 9.4.8 - Pressure Immobilisation Technique - August 2011 (53 KiB)

ANZCOR Guideline 9.5.1 - Emergency Management of a Victim Who Has Been Poisoned - July 2011 (0.3 MiB)

1. Respond to an emergency situation



- **1.1** Recognise and assess an emergency situation
- **1.2** Ensure safety for self, bystanders, and casualty
- 1.3 Assess the casualty, and recognise the need for first aid response
- **1.4** Seek assistance from emergency services

1.1 Recognise and assess an emergency situation



In emergency cases, fast and efficient first aid can save lives. In many cases, first aid can reduce pain and discomfort, prevent further injuries from occurring, or stop an injury or illness from becoming worse. Competent first aiders can also help to calm and reassure the casualty thus reducing stress and anxiety.

The aim is to:

- preserve life,
- prevent injury or illness from becoming worse,
- protect the unconscious casualty,
- · promote a safe environment,
- provide reassurance,
- seek medical help,
- help promote recovery.

All first aid procedures provided by the first aider should be limited by the extent of his/her role and skills. Where the first aid management or medical treatment required is beyond a first aider's level of competence, the first aider should seek assistance from trained professionals such as an ambulance officer, medical practitioner, or occupational health nurse.

In any first aid situation, it is essential that you take precautions to ensure your own safety and the safety of others. Potential risks of illness and/or injury can present in any first aid situation and may result from:

- exposure to blood, vomit, and other body fluids;
- acts of aggression;
- an unsafe scene, for example, oncoming traffic in a road accident, or fallen power lines;
- bystanders placing themselves and others at risk of injury;
- back, neck or shoulder injuries sustained when moving objects;
- the presence of smoke, fire, or poisonous fumes.

Emergency First Aid



Priorities in an Emergency

In all emergency situations, the rescuer must:

- Assess the situation quickly,
- Ensure safety for the rescuer, casualty, and bystanders,
- Call for help,
- Commence appropriate treatment following the Basic Life Support Flow Chart.

Emergency Action Plan

- Call First, call Fast Call for Help
- Stay with the Casualty you should not leave an injured person alone, because if they become unconscious they will not be able to help them self.

Your Action Plan should include the following:

- 1. Quickly assess the situation.
 - **a.** Ensure safety for yourself and the casualty. Where there is danger, remove the cause of danger from the casualty or the casualty from the cause, without putting yourself in danger.
 - **b.** Decide what you must do first, following the priority given under the **DRSABCD** of First Aid.
 - **c.** Move the casualty as little as possible. The casualty should be moved with care only if:
 - in danger from fire, road traffic, hot road surfaces, electric current, drowning etc., providing it is safe to do so.
 - it is necessary to establish and maintain a clear airway or perform CPR.
 - **d.** Reassure the casualty.
 - **e.** Let the conscious casualty rest in the position he finds most comfortable.

How to Call an Ambulance



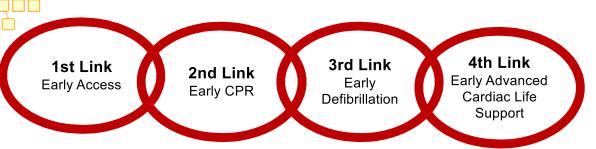
- 1. Dial "000" (Triple Zero) in an emergency (if unsuccessful trying 000 on a mobile then try 112).
- a. Ask for ambulance.
- b. Give the location of where the ambulance has to go (that is, state, district or suburb, street, road, address). Give a cross-street reference. building or landmark.
- **c.** Give the phone number you are calling from and your name.
- **d.** Explain exactly what has happened.
- e. Possible number of casualties (people hurt or sick).
- f. How old the casualty is?
- **g.** If the casualty is conscious/ breathing.
- h. DO NOT hang up until the operator tells you to.

When calling for help, the "call first" approach is recommended. This is because in the vast majority of cardiac arrests, the arrest is due to ventricular fibrillation, which is treatable by defibrillation. Outcomes of these patients have significantly improved when the time to defibrillation is short. In cardiac arrests occurring in children, or where the arrest is due to airway obstruction or inadequate ventilation, (e.g. submersion, drug overdose) there is a potential benefit in commencing resuscitation before calling for help. In these cases, the "call first call fast" approach is recommended as in the next section. In many situations, the call for help will occur at the same time as the commencement of resuscitation.

Where there is more than one casualty, the care of an unconscious casualty has priority.

The casualties that are calling out should not distract the rescuer; their needs are less urgent as they are able to breathe.

Figure 1: The Chain of Survival





Sudden cardiac arrest is the unexpected collapse of a casualty whose heart has stopped. Cardiac Arrest occurs suddenly and is closely linked with sudden chest pain. It is estimated that more than 95% of Sudden Cardiac arrest casualties die before reaching hospital. The casualty in cardiac arrest has only minutes from collapse until death is inevitable.

The 'Chain of Survival' is the term applied to a sequence of actions, which can be instrumental in resuscitating a casualty in cardiac arrest.



Using protection barriers between you and the casualty's body fluids can easily prevent transmission of these diseases. Examples of first aid barriers recommended are:

- Resuscitation masks,
- Gloves and eye or face shields.
- Additional washing before and after first aid is important and gives additional protection.

Before Treatment

Always wear gloves if available take care not to touch any unclean object when wearing gloves or once hands are washed.

- Wash hands with soap and water, or rinse with antiseptic.
- Ensure that hands are washed thoroughly between fingers and under nails.
- If possible, use a protective cover over clothing.
- Cover any adjacent areas likely to produce infection.

During Treatment

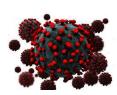
- Avoid contact with body fluids.
- Avoid coughing, breathing, or speaking over the wound.
- Avoid treating more than one casualty without changing gloves between each casualty.
- Use a face shield or mask with a one-way-valve, if available, when doing active resuscitation.
- Use only clean bandages and dressings.

After Treatment

- Wash hands and disposes of gloves.
- Clean up both casualty and yourself.
- Clean up the immediate vicinity.
- Dispose of dressings, bandages, gloves, and soiled clothing correctly by burnina.

Wash hands with soap and water even if gloves were used.

Use of PPE in life threatening situations.



In circumstances where first responders are providing clinical care in life threatening situations (for example, CPR upon arrival) for a patient with suspected COVID-19, you may not have sufficient time to adequately apply full airborne precautions.

In these circumstances, officers are advised to ensure their own safety including:

Use of a surgical mask and eye protection as a minimum precaution, or a (fit-checked) P2/N95 respirator and eye protection if available;

 At completion of the episode of care, removal of gloves (perform hand hygiene), removal of eyewear, gown, and mask (perform hand hygiene again);



- Notification of your employer if you have had a close contact with a suspected or confirmed case of COVID-19 without using appropriate PPE e.g. if COVID-19 was not suspected at the time; and
- Seeking advice from your local public health authority regarding any need to be isolated and monitored for symptoms of the virus.

Learning Activity 2:



As part of your learning journey you need to be aware of your immediate area and its potential hazards. Look around your immediate area and identify 3 potential physical hazards and the potential effect that they may have on an individual.

1.		
	 	
2.	 	
3.		
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Hazard	Typical Problems	Typical Injury/ Illness requiring first aid	
Manual handling	Overexertion/Repetitive movement	Sprains, strains, fractures	
Falls	Falls from heights, slips and trips on uneven surfaces	Fractures, bruises, cuts, dislocations, concussion	
Electricity	Contact with electrical current	Shock, burns, loss of consciousness, cardiac arrest	
Plant	Being hit by projectiles, striking objects, being caught in machinery, overturning vehicles.	Cuts, bruises, dislocations, fractures, amputation, eye damage.	
Hazardous substances	Exposure to chemicals, e.g. solvents, acids, hydrocarbons	Dizziness, vomiting, dermatitis, respiratory problems, burns to skin or eyes.	
Temperature, UV radiation	Effects of heat or cold from weather or work environment	Sunburn, frostbite, heat stress, heat stroke, hypothermia	
Biological	Allergens, needle stick, exposure to infectious agents.	Severe allergic reaction, injuries, skin rash, infection	
Occupational violence	Intimidation, conflict, physical assault	Nausea, shock, collapse, physical injuries	

This tool is not a comprehensive guide to workplace hazards. it provides examples of typical problems created by workplace hazards, an some of the resultant injuries and illnesses. You may have hazards other than those listed here.

Your own list of potential injuries and illnesses, and their likely causes, will be developed from information specific to your workplace and the type of work performed. Use this Tool as a starting point, to provide a framework for collecting the information you need.

Standard precautions



Standard precautions are a set of guidelines that assist first aid officers protect themselves from accidental exposure to blood or other body fluids during the provision of first aid. Standard precautions include wearing gloves when in contact with blood and body fluids and using a disposable mask when giving rescue breaths to the unconscious casualty who shows no signs of life.

General principles for protecting yourself as a first aider:

- Wear gloves whenever there is the potential for contact with blood or other body fluids;
- Wash hands or other skin surfaces thoroughly with soap and water if they are contaminated with blood or other body fluids;
- Wash eyes with running water if they are splashed with blood or body fluids:
- Avoid accidental injuries, for example, cuts from broken glass;
- Encourage the casualty to treat themselves where possible. For example, the casualty may be able to apply direct pressure to their own bleeding wound;
- Use Personal Protective Equipment (PPE) where available, for example, gloves, face shields, masks, and goggles;
- Dispose of waste materials and sharps appropriately.

Observe and manage bystanders.

Bystanders are the people who are in the immediate area of the accident scene. Many bystanders might have witnessed the incident and might be extremely anxious or in a state of shock and unable to protect themselves from any dangers. It might be necessary to assist bystanders to a safe place and to offer shelter, warmth, and reassurance. Bystanders who are in shock and/or are grieving might need emotional support. Preferably this should be offered by a trained counsellor. Some bystanders have even been known to act heroically, placing their own safety at risk in order to assist in some way.

Some people act without thinking in emergency situations and try to implement first aid management that might be incorrect or even dangerous. It is important that bystanders are given clear directions and are made to feel that they can contribute to the management of the situation. Sometimes making suggestions as to how bystanders can help can prevent people from acting inappropriately.

Moving the casualty

Moving the casualty should be avoided in most circumstances. This is especially true if the casualty has sustained any potential injuries to the head, neck, back or spine. Moving the casualty unnecessarily may cause further injuries to the casualty and may cause back, neck or shoulder injuries to the people attempting the move. Moving the casualty should only take place if you are unable to provide life saving measures in the current position or if there are any immediate threats to life, for example, fire and explosion.

When and how to move a casualty



Movement, increasing pain, injury, blood loss and shock, may worsen the condition of a collapsed or injured casualty. A rescuer should only move a collapsed or injured casualty. To ensure the safety of both rescuer and the casualty, or where extreme weather conditions or difficult terrain indicate that movement of the casualty is essential to make possible the care of Airway, Breathing, and Circulation (e.g. turning the unconscious breathing casualty onto the side or turning a collapsed casualty on the back to perform cardiopulmonary resuscitation effectively) to make possible the control of severe bleeding.

All unconscious persons who are breathing must remain on their side.

The trained rescuer should stay with the casualty and send others to seek assistance. If movement is necessary, and help is available, the most experienced rescuer should take charge. Then explain clearly and simply the method of how movement of the casualty will happen to the assistants, and to the casualty if conscious.

Moving a Casualty

If possible, it is always better to move the danger away from the casualty away from rather than move the casualty the As the Carer does not know if the casualty is suffering from any injury, movement could aggravate the injury unnecessarily.

The Carer should only move an unconscious or injured casualty if:

- Danger is present to both the Carer and the casualty.
- Extreme weather conditions or terrain are present.
- The casualty is unconscious requiring them to be placed in the side position.
- Severe life threatening bleeding needs to be controlled.

If movement of the casualty is required:

- Avoid bending/twisting the casualty's back and neck.
- Avoid movement of the casualty's head.
- Drag the casualty rather than lift the casualty.
- Support any injured limbs.
- Gain the assistance of bystanders if possible.

Prior to shifting a casualty, under normal circumstances ensure:

- Completion of both the primary and secondary surveys and any subsequent treatment.
- Protection of all injuries while moving the casualty.
- The casualty is informed of the plan to move them.
- The lifting is smooth and follows a plan of action.
- Communication with all personnel helping to move the casualty.

Specific Management of Electric Shock



- When power lines are in contact with a vehicle or a person, do not approach until the situation is declared safe by authorities. The rescuer should ensure that all bystanders remain at least ten metres clear of any electrified material; examples being a car body, cable, pool of water.
- Metal and water conduct electricity and may be extremely hazardous.
- In a domestic or similar situation it is essential to promptly separate the person in need from the electricity supply. Turn off the supply of electricity and, if possible, unplug the appliance from the power outlet. Until the power is off, avoid direct skin contact with the person or any conducting material.
- If the person is unresponsive and not breathing normally, follow the ANZCOR Basic Life Support Flowchart (Guideline 8).
- Other injuries may require treatment. Burns are common and should be managed following ANZCOR Guideline 9.1.3.
- Promptly refer all who have suffered an electric shock for medical assessment.
- Assess the person who has been struck by lightning: if unresponsive and not breathing normally, follow the ANZCOR Basic Life Support Flowchart (Guideline 8).



Case Study:



Let's look at the following example:

You are asked by your supervisor to clean the glass on the photocopier machine with a particular cleaning chemical. You think about the safety of using a cleaning solution without wearing gloves. You think of the risk of direct contact with the cleaning solution on your hands and its consequences. The chemical could be absorbed through your skin and into your blood stream possibly causing a burn to your skin and generalised poisoning.

Is there an immediate risk to you? Absolutely!

How could the risk be controlled? Your workplace needs to supply disposable gloves if it is expected that staff will use cleaning solutions.

As part of your learning journey read the following scenario and answer the

Learning Activity 4:



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How to minimise risks by controlling the hazards in accordance with WHS requirements





Duties under the Work Health and Safety Act 2011 should be met by developing and implementing policies and procedures to minimise the risk of workplace transmission of infectious diseases. Documented policies and procedures on infection control in first aid should at least cover:

- standard precautions;
- hygiene;
- management of a blood or body substance spillage;
- waste management;
- sharps management;
- laundry management;
- cleaning, disinfecting, and sterilising first aid equipment;
- immunization;
- PPE, and;
- management of skin penetrating injuries and other blood or body substance exposures.

Hygiene

Hand washing is an important measure in preventing the transmission of infection. Adequate hand washing facilities should be provided at the workplace. Hands should be washed using soap and water before and after contact with an ill or injured person. They should also be washed before and after contact with blood, body substances or contaminated items and after removal of protective gloves. An alcoholic chlorhexidine hand wash (available from pharmacies) or equivalent should be used in emergency or field situations, where hand washing facilities are limited or not available.

Waterproof dressings should be provided to allow first aid personnel to cover cuts or abrasions. This reduces the risk of an injured person's blood or body substances coming into contact with a first aid person's broken skin.

First aid personnel who have skin problems, such as dermatitis, and who are exposed to blood and body substances, should seek medical advice regarding the risk of infection.

First aid personnel and workers should not eat, drink, or smoke when working in an area where blood or body substances may be present.

Management of blood or body substance spillage

Spills should be attended to as soon as possible. Protective gloves should be worn. Absorbent material, such as paper towels should be used to absorb the bulk of the blood or body substance. These contaminated materials should then be disposed of in a leak-proof, sealed waste bag.

After this, the area should be cleaned with warm water and detergent and then disinfected. A suitable disinfectant is a freshly prepared 1:10 dilution of 5% sodium hypochlorite (household bleach) in water. Mops and buckets should be rinsed with warm water and detergent and stored dry.

Examples of minimising the risk by controlling the hazard.



Here are some examples of minimising risks by controlling hazards:

- The chair has a wobbly leg remove the chair and report the hazard.
- An electrical cord is frayed take the cord away and report the hazard.
- The corner of the floor mat is turned up tape it down or remove the mat, and report the hazard.
- A table has a sharp edge pad the corner or remove the table, and report the hazard.
- A nail is sticking out of a drawer pad the nail, then stay away from the drawer and report the hazard so that it can be fixed.

How can we control the risk?

Here are some suggestions:

- people can be separated from the risk;
- personal protective clothing can be worn (e.g., goggles, gum boots and gloves);
- staff can be trained and better informed;
- lifting equipment can be used;
- power tools can have guards;
- safety switches can be used;
- air driven tools can be used to reduce the need for electricity;
- office furniture can be carefully selected;
- signs can be erected (in other languages besides English, if required);
- work health and safety policies and procedures should be followed.

Remember that if the hazard cannot be removed then we need to control the risk.

Exposure to blood, vomit, and other body fluids

If you have been exposed to blood or other body fluids follow the procedures outlined below.



Needle stick injury

- Squeeze the needle stick injury site to express as much blood as possible;
- Thoroughly wash the site with soap and water;
- Keep the needle or object that caused the injury, but only if it is safe to do so;
- Follow any additional workplace policies and procedures. Note: You can phone the Needlestick Injury Hotline on 1800 804 823 even if the injury does not occur in the workplace;
- Seek medical advice.

Blood or other body fluid splashes to the mouth, nose, or skin

- Immediately flush the affected mouth, nose, or skin area with running water.
- Wash any outer skin surfaces with soap and water.
- Follow any additional workplace policies and procedures.
- Seek medical advice.

Blood or other body fluid splashes to the eyes

- Flush the eyes with clean or sterile water, as available.
- Follow any additional workplace policies and procedures.
- Seek medical advice.

Assess casualty.

Ask yourself these questions whenever you observe a casualty:

- What do I see? You may see blood, a swollen hand or a bruise.
- What do I hear? You may hear, crying, moaning or heavy breathing.
- What do I smell? You may smell vomit or urine.
- What is my intuition? This person may need attention quickly. You may need to inform your supervisor immediately.

Assessment of casualties needs to be carried out quickly and thoroughly according to workplace procedures so that appropriate action can be taken and help can be sought immediately.

Figure 3: Checking casualty for consciousness.







If there is a response, that is, the casualty squeezes your hand or opens their eyes or moves in some other way, and perhaps speaks, then the casualty is conscious. If there is no response, that is, the casualty does not move or speak, then the casualty is unconscious.

Whether the casualty is conscious or not, do not move the casualty unless:

- they are in danger if they stay where they are, or;
- they need to be moved to receive first aid.

Whether the casualty is conscious or not, call for help. If the casualty is unconscious, an ambulance should be called urgently. Being in an unconscious state can be life threatening.

Conscious person

A person is conscious if they have a state of awareness with the ability to respond to voice and/or touch.

Unconsciousness

Unconsciousness is defined in Guideline 3 from the ARC (28/11/2012) as being "in a state of unrousable, unresponsiveness, where the person is unaware of their surroundings and no purposeful response can be obtained."

Causes of unconsciousness.

The causes of unconsciousness can be classified into four broad groups:

- low brain oxygen levels;
- heart and circulation problems (e.g. fainting, abnormal heart rhythms);
- metabolic problems (e.g. overdose, intoxication, low blood sugar);
- brain problems (e.g. head injury, stroke, tumour, epilepsy).

Combinations of different causes may be present in an unconscious victim e.g. a head injury victim under the influence of alcohol.

Recognition.

Before loss of consciousness, the victim may experience yawning, dizziness, sweating, change from normal skin colour, blurred, or changed vision, or nausea.



Assess the collapsed victim's response to verbal and tactile stimuli ('talk and touch'), ensuring that this does not cause or aggravate any injury. This may include giving a simple command such as, "open your eyes; squeeze my hand; let it go". Then grasp and squeeze the shoulders firmly to elicit a response.

A person who fails to respond or shows only a minor response, such as groaning without eye opening, should be managed as if unconscious.

Management

If the victim is unresponsive and not breathing normally, follow Australian Resuscitation Council and New Zealand Resuscitation Council Basic Life Support Flowchart (ANZCOR Guideline 8).

Any unconscious casualty who remains on his or her back is at risk of an obstructed airway through either inhaling fluids, or by having the upper airway blocked by a relaxed tongue. The most effective first aid method of protecting an unconscious casualty's airway is to put the casualty onto their side. This is a position of comfort in which the casualty has their head down and tilted in such a way as to cause any fluid to drain out onto the ground, and the tongue to move away from the back of the airway giving an open airway.

By turning the casualty on the side, gravity will assist foreign material to drain from the mouth. If possible use the casualty's fingers to clear visible material from the casualty's mouth.

In an unconscious casualty, care of the airway takes precedence over any injury, including the possibility of spinal injury. (See ANZCOR Guideline 9.1.6) All unconscious casualties should be handled gently, with no undue twisting or forward movement of the head and spine.

- 1. Ensure safety of victim and rescuer.
- **2.** Assist victim to the ground and position the victim lying on the side. Ensure the airway is open (See ANZCOR Guideline 4). Do not leave the victim sitting in a chair nor put their head between their knees.
- 3. Call an ambulance.
- 4. Stop any bleeding promptly (See ANZCOR Guideline 9.1.1).
- **5.** Constantly re-check the victim's condition for any change.
- **6.** Ideally, the most experienced rescuer should stay with the victim.

If necessary, it is acceptable to gently move the head into a neutral position to obtain a clear airway. Where possible, an assistant should support the head when an injured casualty is being moved, but time should not be wasted in detailed positioning. The rescuer should not give an unconscious casualty anything by mouth and should not attempt to induce vomiting.

Side Position



- Prepare the casualty by removing bulky and sharp items from pockets.
- Kneel beside the casualty and make sure that both legs are straight.
- Place the arm nearest to you out at right angles 90o to the body.
- Bring the other arm across the chest, and place the hand against the casualty's cheek nearest you.
- Using your other hand, grasp the far leg just above the knee and pull it up ensuring the foot stays on the ground and knee bent.

Keeping the hand against the casualty's cheek, pull on the far leg to roll the casualty towards you onto their side.

Adjust the leg so that both the hip and knee are bent at about right angles.

- Tilt the head back using jaw support to make sure the airway remains open and clear.
 - Jaw Support is supporting the jaw at the point of the chin in such a way that there is no pressure on the soft tissues of the neck. To use Jaw Support, you fold three finger into your hand (Middle, Ring and Little fingers) having Thumb and Index finger pointed out. You place the knuckle of the index finger under the point of the jaw, the index finger is placed along the jaw line and the thumb grips the top of the point of the jaw.
- Adjust the hand under the cheek to maintain the head tilt.
- Maintain observing casualty's breathing and pulse.

Objectives of Resuscitation

To work efficiently, the human brain requires a constant supply of oxygen. A person who has stopped breathing will start to suffer irreversible brain damage within 3-4 minutes. It is with this in mind that a Carer aims to provide basic life support to the casualty by administering an adequate supply of oxygen to the casualty until breathing and/or circulation returns, or until professional medical assistance arrives e.g. the ambulance or doctor.

When calling for help the 'phone first' approach is recommended in life threatening situations. This allows for quicker response time for the Ambulance and is especially important for casualties suffering from a serious injury or illness such as a cardiac arrest. Outcomes for these casualties are significantly improved the quicker treatment is given.

NOTE: Where there is more than one casualty, the care of an unconscious casualty has priority.

Calling for help is easy. Any person can call for an ambulance in an emergency situation. The operator is specially trained in receiving emergency calls. If needed, he/she has access to ambulance officers who can give the correct medical advice over the phone if you are unsure of what to do.



DIAL 000 - (On most mobile phones if "**000**" does not work dial "**112**")

You will be asked if you want Ambulance, Fire or Police and then switched through to the appropriate service. The emergency operator (Ambulance, Fire or Police) will then ask for information on the following:

- The suburb;
- The address of the incident/casualty;
- The nearest cross street:
- What is the emergency (car accident, chest pain etc)?
- What is the casualty's condition (conscious/unconscious)?
- Your name and the phone number you are calling from, and;
- Any other information that the operator may request.

DO NOT hang up until instructed to do so by the emergency operator and keep the phone line free in case there is a need for the Ambulance to call you back.

NOTE: When the ambulance arrives, **DO NOT** stop treatment until instructed by the ambulance officers. This allows the ambulance officers time to quickly prepare their equipment.

Casualty Assessment



Assessment of the situation, a methodical approach based on the priorities of first aid establishes the safety of all concerned and the correct treatment to be given to the casualty. This is summarised with the letters **DRSABCD**. The Primary Survey is designed to detect any life-threatening conditions that require immediate attention.

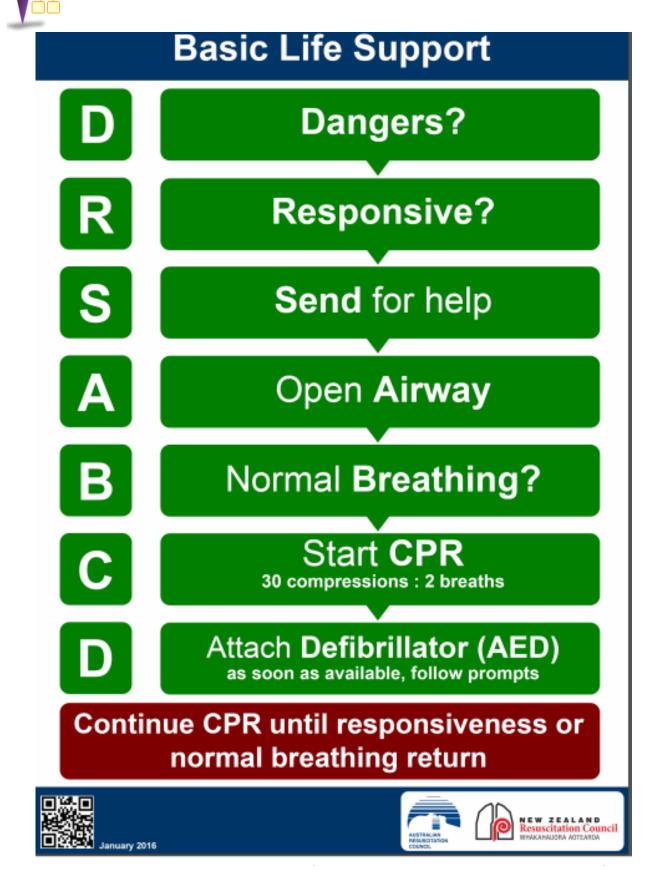
Figure 4: Primary Survey



D	Danger : Is there any danger (actual or potential) to self, bystander, or casualty?	
	If there is danger, it is preferable to move the danger away from the casualty. In some circumstances this will not be possible e.g. fire etc. In these situations the casualty needs to be carefully moved away from the danger.	
R	Response : Is the casualty conscious or unconscious? If unconscious, the casualty needs to be placed in the side position.	
S	Send for Help	
A	Is the airway clear or blocked? If blocked, the airway needs to be cleared. Opening the airway (look for signs of life - Call 000 /resuscitation team)	
В	Normal breathing? (give two rescue breaths if not breathing normally);	
С	Rescuers should perform chest compressions for all ages at a rate of 100 to 120 compressions per minute (almost 2 compressions/second)*	
D	Attach AE D as soon as available and follow its prompts (If available) (AED – Automated External Defibrillator)	

^{*} ANZCOR Guideline 6 - Compressions





Open airway

- 1. Place one hand on casualty's forehead;
- 2. Place finger tips of the other hand under the casualty's chin;



- **3.** Tilt head back gently and lift the chin to open airway;
- **4.** Put on your gloves and remove any visible foreign matter, for example, broken teeth;
- **5.** Check for signs of life, for example, unconscious, not answering questions, not breathing normally, not moving.

Breathing

Breathing is vital to sustain human life. When we breathe in, we use the oxygen from the air to keep our cells and organs alive. To put it very simply, without oxygen, we will die.

Once you have determined whether the casualty is conscious or unconscious, quickly determine whether the casualty is breathing. To do this, you will need to get close to the casualty even if it means getting down onto the floor with them. Place one hand close to their mouth and nose and your other hand on their chest, then place your ear close to their nose while observing at their chest. Look, listen and feel for signs of breathing for about 10 seconds.

- Look for rising of the chest.
- Listen for breathing (either breathing in or out) from the nose or mouth.
- Feel for breathing from the nose or mouth and for rising of the chest.



Figure 6: Checking casualty for breathing.

Whether the casualty is breathing or not, call for help. If the casualty is not breathing, an ambulance should be called urgently.

Airway



General Principles

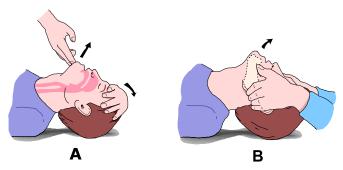
When a casualty is unconscious, all muscles are relaxed. If the casualty is left lying on the back, the tongue, which is attached to the back of the jaw, falls against the back wall of the throat and blocks air from entering the lungs. Other soft tissues of the airway may worsen this obstruction. The mouth falls open, but this tends to block, rather than open the airway.

The obstruction to the airway by these soft tissues may be overcome by Backward Head Tilt together with the Chin Lift.

Figure 7: Backward Head Tilt and Chin Lift



- (A) Open the victim's airway by tilting his/her chin gently with one hand, while pushing back on his/her forehead with the other hand.
- (B) If you suspect a neck injury, put your fingers behind the jawbone just below the ear, and push the jaw forward to open the victim's mouth.





The unconscious casualty is further at risk because of being unable to swallow or cough out foreign material in the airway. This may cause airway obstruction, laryngeal irritation or foreign material may enter the lungs. For this reason, the rescuer should not give an unconscious casualty anything by mouth, and should not attempt to induce vomiting.

If foreign material irritates the vocal chords, a protective reflex muscular spasm (laryngeal spasm) prevents the entry of material into the lungs. This may result in partial or complete airway blockage of the entrance of the trachea (windpipe) with the casualty often making a "crowing" noise during attempts to breath. Airway closure due to the laryngeal spasm can be complete; then there is no "crowing" because there is no airflow into or out of the casualty. That can persist until the casualty becomes blue or unconscious from the lack of oxygen. When consciousness is lost, spasm usually relaxes.

In an unconscious casualty, care of the airway takes precedence over any injury, including the possibility of spinal injury. All unconscious casualties should be handled gently with no twisting or bending of the spinal column and especially the neck. If it is necessary, move the head gently to obtain a clear airway. Where possible, an assistant should support the head when an injured casualty is being moved, but no time should be wasted in detail positioning.

Maintain an open airway.



• The upper airway in infants is easily obstructed because of the narrowness of the nasal passages, the entrance to the windpipe (vocal chords) and the trachea (windpipe). The trachea so soft and pliable and may be distorted by the excessive backward head tilt or jaw thrust. Therefore, in infants the head should be kept neutral and maximum head tilt should not be used. The lower jaw should be supported at the point of the chin with the mouth maintained open. There must be no pressure on the soft tissues of the neck. If these maneuvers **DO NOT** provide a clear airway, the head may be tilted backwards very slightly.

Figure 8: Advanced Life Support for Infants and Children



(as per http://www.resus.org.au – accessed 21/2/21)

Advanced Life Support for Infants and Children

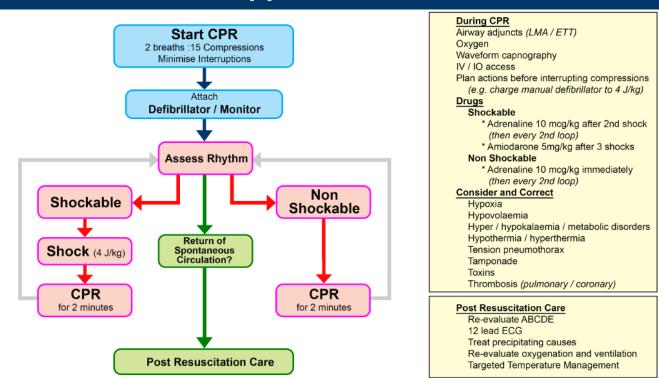








Figure 9: Basic list of abnormal signs and symptoms

	Abnormal signs	Abnormal symptoms
General appearance	Pale, grey, flushed.Slight tremor to seizure	
General behaviour	 Anxious, tense, confused, restless. Irrational Disoriented to time or place 	 Feeling confused Premonition i.e. flashing lights, halos. Weakness or can't move or feel limbs
Head	 Cut, bruise, swelling, blood. Blue around lips Pinpoint or large pupils Pupils are not equal in size. Pupils do not constrict with light. Blood or clear ooze coming from ears. Blood from nose or eyes Foaming at the mouth 	HeadacheBlurred or double visionDizziness
Skin	SweatingHot or cold to touch.Redness	Feels hot or cold.Pain
Breathing, chest	 Wheezing or laboured Rapid Coughing (particularly blood) Both sides of chest do not move together 	Difficult or painful breathingTight chest
Back, neck		• Pain
Abdomen	Vomiting (particularly blood)Protruding organs	Nausea, painHunger or thirst
Limbs	DeformitySwelling, bruisingCannot move fingers or toes	PainCan't feel fingers or toes.Weakness



in English and say this when you ring up – before they get the interpreter to ask further questions. This allows them to send an ambulance immediately.

112 emergency number for mobile phones

The GSM (Global System of Mobile Communications) international standard emergency number is 112, which can only be dialed on a digital mobile phone. It can be used anywhere in the world that has GSM coverage so that you will automatically be put through to that country's emergency number.

People with speech or hearing impairment and calls to triple zero (000)

If you have a speech or hearing impairment and use a telephone typewriter (TTY), PC or modem to make telephone calls, you can call for an ambulance by dialing '106'. This puts you through to the text-based National Relay Emergency Call Service. The operator who answers your call relays your typed information to the ambulance call-taker (or police or fire services).

Calling triple zero (000) when you cannot speak.

If you call triple zero (000), but cannot speak or make any sounds, the operator will prompt you to dial '55'. The police will either try to call back or send a car to the address you are calling from, to check the situation. If you don't dial 55 when requested, the operator will disconnect your call. This system prevents accidental phone calls from unlocked mobile phones.



A Check the Airway.

Open airway by tilting patient's head back and lifting the chin. Do not perform a head tilt on babies or injured patients.

Check that the airway is not blocked; this is done by sweeping the mouth with your fingers removing any solid pieces of food or other things, and letting any fluid drain out.

If this simple maneuver is unsuccessful in opening a patient's airway you need to get someone to call an ambulance immediately.

B Check Breathing 'look, listen and feel'.

Look for the rise and fall of the chest.

Listen for breath sounds from their mouth or nose.

KE

Feel for the rise and fall of chest.

If the patient is breathing keep the patient on their side (recovery position). Remain with the patient while continuing to monitor the patient and check the breathing and pulse every few minutes until Ambulance arrives.

If the patient is not breathing, the first-aider should only roll the unconscious person onto their side if there is foreign material present in the mouth. Open the airway by tilting patient's head back and after lifting their chin, commence rescue breathing as follows:

- ADULT pinch the patient's nostrils and seal your mouth over patient's mouth and give 2 full breaths.
- CHILD use 2 smaller breaths for a child.
- **BABY** seal your mouth over the baby's mouth and nose and give 2 quick puffs.

In each case ensure that the chest rises and falls with each breath.

C Check Circulation

First aiders are no longer required to check for a pulse when managing an unconscious patient who is not breathing.

They should commence rescue breathing as follows:

- ADULT 2 breaths for about 2 seconds
- CHILD 2 breaths for about 2 seconds
- BABY 2 breaths (puffs) for about 2 seconds

Ensure that the patient's chest rises and falls with each breath and commence CPR (Cardio-Pulmonary Resuscitation).

- ADULT Position the heel of one hand on the center of the lower half of breastbone (sternum) while grasping the wrist with your other hand.
- **CHILD** Position the heel of one hand on the center of the lower half of the breastbone (sternum)

• **BABY** – Position 2 fingers in the center of the breastbone (sternum) just between the nipples

Give 2 breaths to every 30 compressions (at 100 compressions per minute). (Figure 12)

Compress chest to 1/3 of its depth. (Figure 11)

If pulse returns but the person has no breathing continue rescue breathing until Ambulance arrives.

Always stay with the person until help arrives.

Keep the '000' (Ambulance dispatcher) informed of persons condition (if possible, ask someone to do this for you)

Check for any visible signs of injury and if present;

Control severe bleeding by applying direct pressure to the affected area (take care to not come in direct contact with blood)

Support broken bones (fractures) through immobilisation of the limb Prevent further injuries to the casualty.

Figure 11: Position of hands







presence or absence of circulation. Lay rescuers should not attempt to palpate a pulse to determine whether or not to give chest compressions.

Locating the Site for Chest Compressions

There is insufficient evidence for or against a specific hand position for chest compressions during CPR in adults. The Australian Resuscitation Council recommends the lower half of the sternum as the compression point in all age groups.

Direct visualisation may be used to locate the compression point. For the ease of teaching the lower half of the sternum equates with the "center of the chest". This is simple method will minimize pauses between ventilations and compressions and may encourage more people to attempt CPR. Avoid compression to the lower limit of the sternum. Compression applied too high is ineffective and if applied too low may cause regurgitation and/or damage to internal organs.

Method of Compression

Infants

In infants, the two fingers technique should be used by the rescuer whether they are lay rescuers, healthcare or trained first aid responders in order to minimise transfer time from compression to ventilation. Having obtained the compression point the rescuer places the pulps of the two fingers on this point and compresses the chest.

Children and Adults

Once you have obtained the compression point, the rescuer places the heel of their hand on this point, with the fingers parallel to the ribs and preferably slightly raised; so that pressure will not be exerted directly on the ribs. The rescuer places their hand securely on top of the first. All pressure is exerted through the heel of the bottom hand and the rescuers body weight is the compressing force. Therefore, the rescuer's shoulder should be vertically over the sternum and the compressing arm kept straight.

Casualties requiring chest compressions should be placed supine on a firm surface (e.g. backboard or floor) before chest compressions to optimize the effectiveness of compressions. Compressions should by rhythmic with equal time for compression and relaxation. The rescuer must avoid either rocking backwards and forwards or using thumps and quick jabs. Rescuers should allow for complete recoil of the chest after each compression.

Depth of Compression

The lower half of the sternum should be depressed by one third of the depth of the chest with each compression. This equates to at least 4-5cm in adults.

Rate of Chest Compressions

Rescuers should perform chest compressions for all ages at a rate of approximately 100 compressions per minute (That means almost 2 compressions per second). This does not imply 100 compressions will be delivered each minute since the number will be reduced by the interruptions for breaths by rescue breathing.

2.2 Provide first aid in accordance with established first aid principles

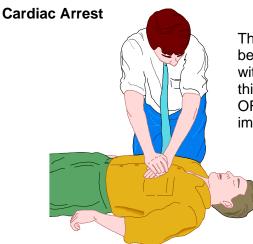
Heart Conditions

Each year, thousands of people in Australia die from heart disease. Early Treatment may be able to reverse or reduce the damage to the heart and decrease the number of deaths from heart disease.



With today's life styles, the chances of heart disease are increased by:

- Obesity;
- Smoking;
- Stress:
- High cholesterol;
- High blood pressure;
- Family history;
- Age and/or gender.



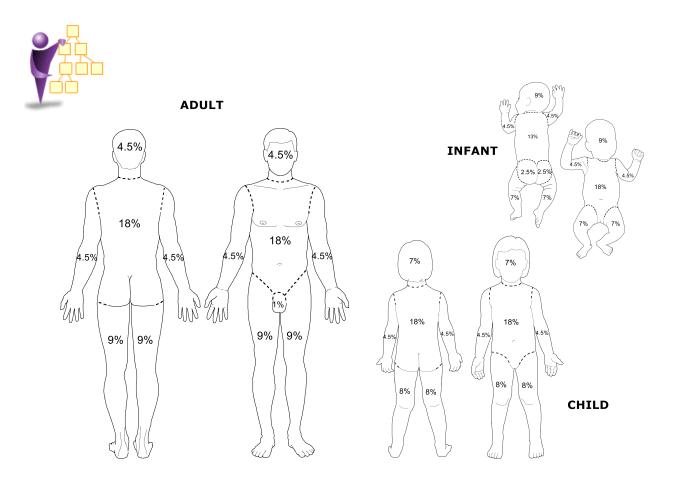
This is where the casualty's heart is not beating. The casualty would therefore present with NO SIGNS OF LIFE. Regardless of how this was caused, if the casualty has NO SIGNS OF LIFE then CPR must be commenced immediately.

Heart Attack

The heart requires oxygenated blood in order to function effectively, the chances of somebody having a heart related illness increase in older persons. People who have a family history are also at higher risk. A lot of built up fatty deposits inside the blood vessels causes a narrowing effect, which reduces the amount of blood flow to the heart, tissue, and cells. This reduces the ability of the heart and other organs to function correctly.

When blood flow to the heart muscle is interrupted, a person is said to be "having a heart attack". A casualty who has a heart attack is also known as a "myocardial infarction", this may or may not result in death. To reduce the chance of sudden death from heart attack urgent medical care is required. "Every minute counts. Dial 000".

Figure 18: Rule of nines for body surfaces



Types of burns



• HEAT: Flames, steam and/or liquids.

• ELECTRICAL: Damaged/faulty cable, power points or lightning.

• CHEMICAL: Acids, caustic soda etc.

• FRICTION: Any friction generating heat e.g. rope, carpet.

• RADIATION: Sun.

There are two (2) methods used to determine the severity of a burn. Both these methods need to be used together.

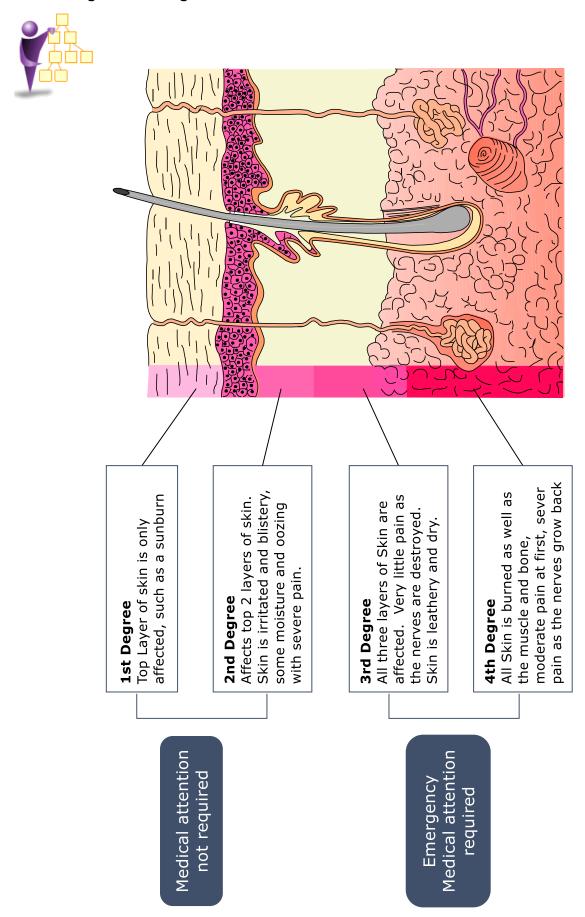
Depth of Burns



The burn is classed as Superficial, Partial thickness or Full thickness.

- Superficial Burn where the top area of skin is damaged. E.g. light sun burn
- Partial thickness burns affect the outer layers of skin.
- **Full thickness** burns can affect all layers of skin, tissue, muscle and bone.

Figure 19: 4 Degrees of Burns



Red-back Spider

A Red-back spider bite may threaten the life of a child or a sick elderly person, but is rarely serious for an adult. The Treatment for the bite is also different than for a Funnel Web.



Signs and Symptoms

- Immediate pain to the bite site.
- Bite site becomes red, hot and swollen.
- Intense localised pain.
- Pain increases and spreads.
- Nausea and/or vomiting.
- · Stomach pain.
- Profuse sweating.
- Swollen groin and armpit glands.





- Call 000 ambulance.
- Ice pack over bite area
- Monitor Airway, Breathing, Circulation
- **DO NOT** use the Pressure Immobilisation technique with Red Back Spider Bite as the poison spreads slowly and the pressure will increase pain.

Funnel Web Spider

All spiders have fangs, but the only spider that is an immediate threat to life in Australia, is the Funnel Web. If signs and/or symptoms occur from any spider bite, call 000 for an ambulance.

Any bite from a large dark spider should be treated as if it is a dangerous spider bite and immediate Treatment should be provide.

Signs and Symptoms

- Pain to the bite site.
- Tingling around the mouth.
- Copious secretions of saliva.
- Profuse sweating.
- Stomach pain.
- Nausea and/or vomiting.
- Confusion.
- · Breathing difficulties.
- Loss of consciousness (Usually a sudden onset)





Fire ants



Fire Ants (Solenopsis invicta) are a serious insect pest in Australia. They have the potential to destroy our outdoor lifestyle, environment, and agricultural production.

Social impacts

Fire ants are a social menace because of their sting. Encounters with fire ants may involve dozens of ants that may move quickly and remain undetected as they crawl up your leg. By the time they sting, there may be tens or hundreds of ants on your body, and they tend to all sting at once.

About the sting

Fire ants have a sting in their tail, similar to wasp and bees. However, unlike bees, fire ants can sting repeatedly. Stings from fire ants can cause a painful, burning and itching sensation, which can last for an hour. The sensation produced by multiple stings is that the body is on fire; hence, the name fire ant.

First aid Treatment for Fire Ants



- Apply a cold compress or ice as soon as possible to the affected areas to reduce swelling and relieve pain.
- After a few hours (or even a day or two), a small blister or pustule can form at the site of each sting. These may become very itchy and can take up to 10 days to heal. To prevent secondary infection, wash the blisters gently with soap and water and be careful not to break them.





Treatment for Non-tropical Bluebottle stings

- Pick off any adherent tentacles with fingers (this is shown as not harmful to the rescuer);
- Rinse stung area well with seawater to remove invisible stinging cells;
- Place the casualty's stung area in hot water (no hotter then what the rescuer can comfortably tolerate);
- If local pain is unrelieved by heat, or if hot water is not available the application of cold packs or wrapped ice may be effective.

Figure 25: Other Jellyfish around Australia



Name	Common name	Location	
Physalia.	Bluebottle Portuguese man-o- war Pacific man-o-war	Australia wide and in most warm ocean waters	
Catostylus.	Blubber	Worldwide	
Carybdea Rastoni	Jimble	Australia wide but more common in southern areas and Western Australia	
Cynea	Hair Jelly, Snottie, Lions Mane	Worldwide	
Tamoya	Fire Jelly, Morbakka, Moreton Bay Stinger	Tropical Australian waters, all of Queensland and	
Pelegia	Little Mauve Stinger	northern New South Wales coast – often an open water jellyfish.	

Treatment for heat exhaustion



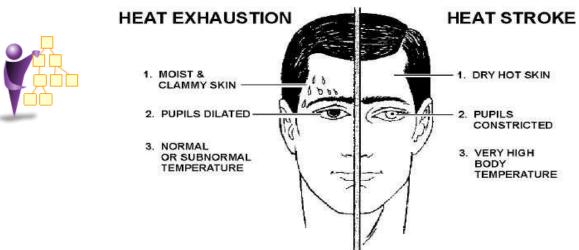
- DRSABCD
- Move the casualty to a cool, shaded area;
- Rest and reassure the casualty;
- remove outer clothing;
- Give frequent small sips of water;
- Sponge the casualty down with cool water;
- Fan the casualty;
- DO NOT cause shivering/goose bumps;
- Apply ice compresses to the neck, groin and armpits;
- Monitor the casualty's ABCs and level of consciousness;
- If the casualty becomes unconscious then check **DRSABCD**;
- Call 000 for the ambulance (Call First and Call Fast) if casualty condition worsens.

Heat Stroke



The normal body temperature is approximately 36.5 degrees Celsius. The brain controls and regulates the body's temperature. When the brain is overloaded or not functioning correctly, the body's temperature can rise. Hyperthermia is a continuing process. Body temperature rises and can lead to heat cramp followed by heat exhaustion and then heat stroke if untreated.

Figure 26: Heat exhaustion and Heat stroke



Heat Stroke can be caused by:

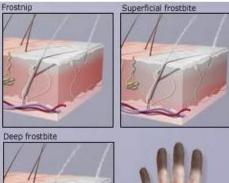


- Hot climates;
- Infection and illnesses;
- Insufficient fluid intake;
- Overdressing for the climate;
- Physical exercise.

Figure 28: Frostbite















Signs and Symptoms



- Cold to touch;
- Loss to sensation;
- Numbness;
- Pain whilst rewarming;
- White or mottled blue skin.

Treatment for Frostbite



- DRSABCD;
- Call 000 for an ambulance. (Call First and call Fast);
- Place casualty in a warm area;
- Protect the casualty from the cold;
- · Remove any wet clothing;
- Treat hypothermia before frostbite;
- DO NOT allow refreezing of the affected part;
- DO NOT rub or massage the affected area as this can cause tissue damage;

- DO NOT break blisters;
- DO NOT give the casualty alcohol.

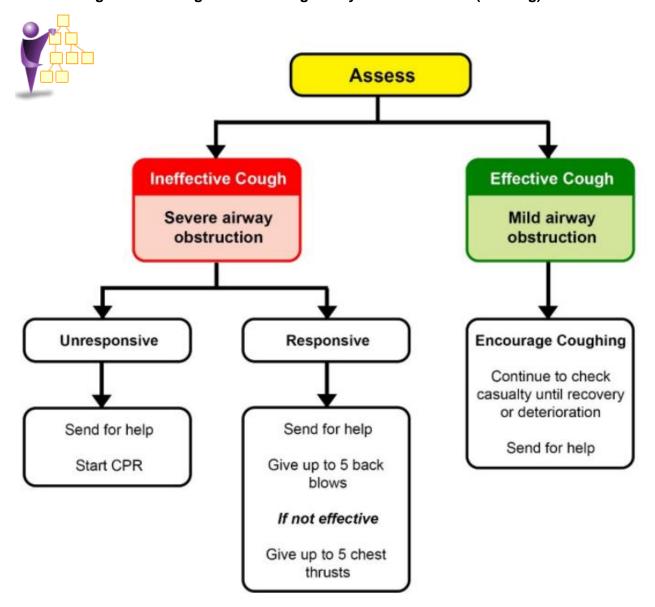


Figure 29: Management of foreign body and obstruction (choking)

Spinal column



The segment of the spinal cord at which the damage occurs determines which parts of the body are affected. Damage at one segment will affect function at that segment and segments below it.

Figure 30: Spinal column.

Neck



Cervical Region (C1 - C7)

This region control signals to the neck, arms, hands, and muscles of breathing (the diaphragm)

Chest

Thoracic Region (T1 - T12)

This region relay signals to the torso and some parts of the arms.

Lower back

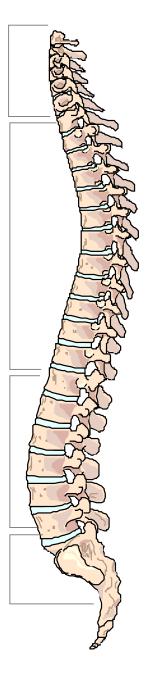
Lumbar Region (L1 - L5)

This region control signals to the hips and legs.

Tailbone

Sacrum Region (S1 - S5)

This region relay signals to the groin, toes, and some parts of the legs.





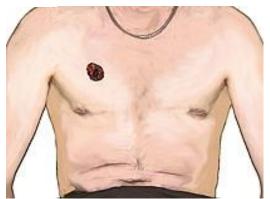
Flail Segment

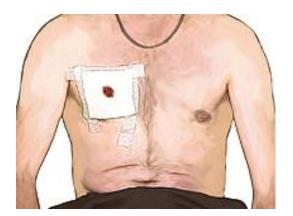
This is when two or more adjacent ribs are fractured in two or more places. The affected area breaks away from the rib cage and moves in the opposite direction (paradoxical breathing) to the rest of the rib cage during inspiration and expiration. Generally there is an associated collapsed lung (pneumothorax).

Figure 31: Penetrating Chest wound



If wound is open, apply plastic or a non-stick pad taped on three sides only leaving bottom side un-taped to allow for air to escape from the chest. A gloved hand can also be used to seal the wound until more suitable material is available.





Signs and Symptoms



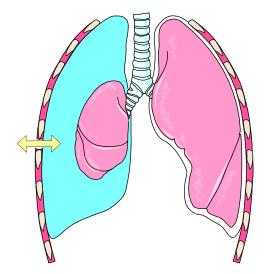
- Anxious and/or restless;
- Decreased air movement to injured side;
- Decreased level of consciousness leading to unconsciousness;
- Difficult and/or noisy breathing;
- Flail segment;
- Frothy bloodstained saliva (sputum);
- Obvious chest injury (e.g. gunshot, stabbing);
- Pain increasing on breathing, movement and/or coughing;
- Pale or blue skin;
- Rapid deterioration of the casualty;
- Sign and Symptoms Shock.

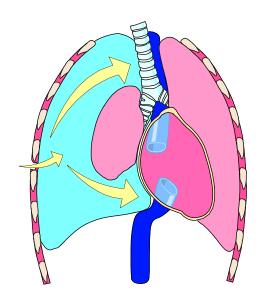
Figure 32: Pneumothorax.

Normal Pneumothorax.

Tension Pneumothorax







Two sets of lungs showing two cases where air or gas has entered the pleural cavity: (left) normal pneumothorax and (right) tension pneumothorax.

Treatment for Chest Injuries



- DRSABCD;
- Call 000 for an ambulance. (Call First and call Fast);
- Place the casualty with their head and shoulders slightly elevated and leaning towards the injured side;
- Support the injured area using a large pad or pillow;
- · Reassure the casualty;
- Cover any entry wounds;
- Cover the wound with an airtight dressing;
- Tape the top and sides of the dressing;
- DO NOT tape the bottom of the dressing. This acts as a one-way valve and reduces the air entering through the wound;
- If the casualty is unconscious, place into the side position with the affected side down, unless an object is embedded in the casualty;
- If an object is embedded in the chest: DO NOT remove object;
- Apply padding around the object;
- Stop any bleeding;

(b) (c) (d)

Figure 34: Folding a Triangular Bandage

Fractures



A fracture is any break in the continuity of a bone. It can be either a complete break (bone in 2 or more pieces) or incomplete (bone has bend or splintering of the bone but the bone has not completely come apart). The aim of treatment is to assist the bone to recover fully in strength, movement and sensitivity. Some complicated fractures may need surgery and/or surgical traction for best results.

Causes of fractures of healthy bones include incidents such as sporting injuries, vehicle accidents and falls. As we get older, our bones usually become more brittle. Osteoporosis and some types of cancer can also cause the bones to fracture more easily.

- Closed fracture: the skin remains intact and there is little damage to surrounding tissue;
- Open fracture: the bone is exposed to the outside environment;
- Complicated fracture: in addition to the fracture, there is injury to the surrounding structures. There may be damage to the veins, arteries or nerves and there may also be injury to the lining of the bone (the periosteum).



Fractures may be caused a number of ways:

- Direct force; where sufficient force is applied to cause the bone to fracture at the point of impact;
- **Indirect force**; where force or kinetic energy, applied to a large, strong bone, is transmitted up the limb, causing the weakest bones to fracture;
- **Spontaneous or spasm-induced**; where fractures are associated with disease and/or muscular spasms.

These are usually associated with the elderly, and people with specific diseases affecting the bones. Always exercise care when assessing an elderly casualty as the condition known as osteoporosis or 'Chalky Bones' causes bones to fracture easily, often in several places. Always suspect a fracture if an elderly person complains of pain or loss of power to a limb.

Be especially aware of fractures at the neck of the femur (near the hip), a very common fracture in the elderly.

Young children are also prone to fractures. Arm and wrist fractures are common with children. As young bones **DO NOT** harden for some years, children's fractures tend to 'bend and splinter', similar to a broken branch on a tree - hence the common name 'greenstick fracture'.

Figure 35: Skeleton

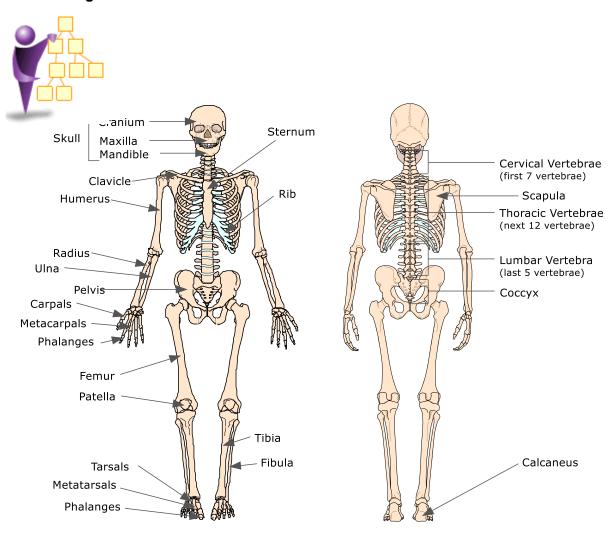




Figure 36: First Aid for Asthma

(accessed 21/1/21)

irst Aid for Astl

Sit the child upright.

Stay calm and reassure the child. Don't leave the child alone

Give 4 separate puffs of a reliever inhaler blue/grey puffer (e.g. Ventolin, Asmol or Airomir)

Use a spacer, if available.
Give one puff at a time with 4–6 breaths after each puff.

Use the child's own reliever inhaler if available. If not, use first aid kit reliever inhaler or borrow one

Wait 4 minutes.

If the child still cannot breathe normally, **give 4 more puffs.** Give one puff at a time (Use a spacer, if available).

If the child still cannot breathe normally,

CALL AN AMBULANCE IMMEDIATELY (DIAL 000)

Say that a child is having an asthma attack.

Keep giving reliever.

Give 4 separate puffs every 4 minutes until the ambulance arrives.

HOW TO USE

INHALER

WITH SPACER

Use spacer if available*



- Assemble spacer (attach mask if under 4)
- · Remove puffer cap and shake well · Insert puffer upright into spacer
- · Place mouthpiece between child's teeth and seal lips around it OR place mask over child's mou and nose forming a good seal
- · Press once firmly on puffer to fire one puff into spacer
- · Child takes 4-6 breaths in and out of spacer
- · Repeat 1 puff at a time until 4 puffs taken – remember to shake the puffer before each puff
- · Replace cap

WITHOUT SPACER Kids over 7 if no spacer



- · Remove cap and shake well · Get child to breathe out away
- from puffer · Place mouthpiece between child's teeth and seal lips around it
- Ask child to take slow deep breath • Press once firmly on puffer while
- child breathes in · Get child to hold breath for at least
- 4 seconds, then breathe out slowly away from puffer · Repeat 1 puff at a time until 4 puffs
- ber to shake the puffer before each puff
- · Replace cap

*If spacer not available for child under 7. cup child's/helper's hands around child's nose and mo to form a good seal. Fire puffer through hands into air pocket. Follow steps for WITH SPACER.

NationalAsthma CouncilAustralia

Give 2 separate doses of a Bricanyl inhaler

If a puffer is not available, you can use Bricanyl for children aged 6 years and over, even if the child does not normally use this.

Wait 4 minutes.

If the child still cannot breathe normally, give 1 more dose.

If child still cannot breathe normally,

CALL AN AMBULANCE IMMEDIATELY (DIAL 000)

Say that a child is having an asthma attack.

Keep giving reliever

Give one dose every 4 minutes until the ambulance arrives

BRICANYL

For children 6 and over only



- · Unscrew cover and remove
- · Hold inhaler upright and twist grip
- · Get child to breathe out away from inhaler
- Place mouthpiece between child's teeth and seal lips around it
- · Ask child to take a big strong breath in
- · Ask child to breathe out slowly away from inhaler
- Repeat to take a second dose remember to twist the grip both ways to reload before each dose
- Replace cover

Not Sure if it's Asthma?

CALL AMBULANCE IMMEDIATELY (DIAL 000)

If the child stays conscious and their main problem seems to be breathing, follow the asthma first aid steps. Asthma reliever medicine is unlikely to harm them even if they do not have asthma

Severe Allergic Reactions CALL AMBULANCE IMMEDIATELY (DIAL 000)

Follow the child's Action Plan for Anaphylaxis if available. If you know that the child has severe allergies and seems to be having a severe allergic reaction, use their adrenaline autoinjector (e.g. EpiPen, Anapen) before giving asthma reliever medicine

For more information on asthma visit: Asthma Foundations www.asthmaaustralia.org.au National Asthma Council Australia www.nationalasthma.org.au If an adult is having an asthma attack, you can follow the above steps until you are able to seek medical advice.

Although all care has been taken, this chart is a general guide only which is not intended to be a substitute for individual medical advice/treatment. The National Asthma Council Australia expressly disclaims all responsibility (including for negligence) for any loss, damage or personal injury resulting from reliance on the information contained. © National Asthma Council Australia 2011.



The further injury was sustained because the First Aider has gone beyond their level of training. A First Aider with basic training could be expected to:

- Use reasonable care in assessing the priorities of the situation in accordance with their training and take steps to call for medical assistance;
- Keep the casualty stabilised until help is available;
- Follow recommended first aid guidelines;
- Not misrepresent themselves or take undue risks.

Learning Activity 9:



As part of your learning journey into becoming competent in CPR answer the following questions:

١.	What is your legal obligation if you are directly involved with your vehicle in an accident?		
2.	What do you understand by the term "Implied Consent"		
3.	What are the basic acts that can be reasonably expected from you as a First Aider in the workplace?		

Figure 37:



First Aid Kits		Contents		
Description of Appliance or Requisite		First Aid Kit		
	Α	В	С	
Adhesive plastic dressing strips, sterile, packets of 50	2	1	1	
Adhesive dressing tape, 2.5cm x 5 cm	1	1	-	
Bags, plastic, for amputated parts: small	2	1	1	
Medium	2	1	1	
large	2	1	-	
Dressing, non-adherent, sterile, 7.5cm x 7.5cm	5	2	-	
Eye pads, sterile	5	2	-	
Gauze bandages 5cm	3	1	1	
10cm	3	1	-	
Gloves, disposable, single	10	4	2	
Rescue blanket, silver space	1	1	-	
Safety pins, packets	1	1	1	
Scissors, blunt/short-nosed, minimum length, 12.5cm	1	1	-	
Splinter forceps	1	1	-	
Sterile eyewash solution, 10ml single use ampoules or sachets	12	6	ı	
Swabs, pre-packed, antiseptic, packs of 10	1	1	-	
Triangular bandages, minimum 90cm	8	4	1	
Wound dressings, sterile, non-medicated, large		3	1	
First aid pamphlet (as approved by WorkCover)		1	1	

- **First Aid Kit A** for construction sites at which 25 or more persons work and for other places of work at which 100 or more persons work.
- First aid Kit B for construction sites at which less than 25 persons work and for other places of work at which less than 100 or more than 10 persons work.
- First Aid Kit C for any place of work, other than a construction site at which 10 or less persons work.

2.6 Operate first aid equipment according to manufacturers' instructions



There are a number of pieces of equipment that can be utilised in the administration of first aid. Life support equipment should be regular checked for deterioration, to ensure that it is functioning properly and cleanliness. The first aiders should be up to date on how to use the equipment and maintain it. There is little benefit in having up to date life support equipment available if no one knows how to use it. Manufacturers /suppliers instructions should be kept in an accessible place so that they can be referred to if needed. However, prior knowledge is the best as you don't want to have to go and read the instructions in an emergency.

First aid equipment refers to the first aid kit, the defibrillator and other equipment such as Epi-pens, puffers, and spacers.

An automated external defibrillator (AED) is a portable automatic device used to restore normal heart rhythm to patients in cardiac arrest. An automated external defibrillator is applied outside the body. The AED automatically analyses the casualty's heart rhythm and advises the first-aider whether or not a shock is needed to restore a normal heart beat. If the casualty's heart resumes beating normally, the heart has been successfully defibrillated.

The defibrillator is very simple to use. The first-aider simply follows the instructions. However, it is strongly recommended that you complete a short course on using a defibrillator so you are well prepared should you need to use it.

Be aware of what you can and cannot use as there a number of pieces of equipment that require separate training to be able to use. An example of this is oxygen therapy.

Life Support Equipment that you may come in contact with;

Figure 39: Oxygen therapy – oxygen mask







Figure 40: Ambu bag



Figure 41: Example of a First Aid Kit





Figure 42: Automated External Defibrillator - AED







Lay persons or Volunteers acting as 'Good Samaritans' are under no legal obligation to assist a fellow being, that is, they have no legal 'duty to rescue'. However, uniquely, in The Northern Territory, persons are required by Statute law to render assistance to any other in need.

Having decided to assist however, a standard of care appropriate to their training (or lack of training) is expected. Generally speaking, that standard is low. Rescuers need not fear litigation if they come to the aid of a fellow human in need. No 'Good Samaritan' or 'Volunteer' in Australia, or probably elsewhere, has ever been successfully sued for consequences of rendering assistance to a person in need. Indeed, legal protection is provided.

All Australian States and Territories have enacted Statutes which provide some measure of protection for the 'Good Samaritan' and/or the 'Volunteer'.

They are required to act at least with 'good faith' and 'without recklessness'. In New South Wales and Queensland the 'Good Samaritan' or 'Volunteer' is required to act with reasonable care and skill – a standard which is in fact no different from the common law standard which pre-dated the legislation. Volunteers must however, act within the scope of activity of their organisation and according to instruction of the organisation. Organisations which control the Volunteer however, are generally not afforded the same protection for the actions of their Volunteers.

The standard of care required of a person who has a duty of care to respond, is higher. Like other persons in our community who hold themselves out to have a skill, they must perform their tasks to a standard expected of a reasonably competent person with their training and experience. However, this does not mean a standard of care of the highest level.

Doctors (and healthcare professionals)

Doctors, and probably other trained healthcare workers, who have been requested to provide assistance outside their usual place of work when ready for duty have a Common Law obligation to do so in New South Wales, and probably also in the Australian Capital Territory.

Trained Volunteers

It is uncertain whether a trained Volunteer eg a surf life-saver or a St John Volunteer, has a legal duty to rescue when on duty, although one could argue strongly from an ethical point of view that such duty does exist, provided that the rescuer is not placed in danger. Indeed, a rescuer is owed a duty of care by the rescued victim not to be endangered.

When not on duty, trained Volunteers would be regarded as 'Good Samaritans' if deciding to rescue."

3. Communicate details of the incident



- Accurately convey incident details to emergency services
- Report details of incident in line with appropriate workplace or site procedures
- Complete applicable workplace, or site documentation, including incident report form
- Maintain privacy, and confidentiality of information in line with statutory or organisational policies

3.1 Accurately convey incident details to emergency services



After identifying the casualty's medical condition or injury and the extent of damage, a decision will have to be made as to what kind of further assistance is required, if any.

This is when a decision needs to be made promptly by somebody, usually the supervisor. Not all casualties will need an ambulance.

Let's take a few examples and think about what kind of further assistance will be required for the following:

- a sprained ankle;
- a broken leg;
- an asthma attack, where the casualty has fully recovered after using a Ventolin inhaler:
- a choking episode, where the casualty could not cough, speak, or breathe;
- a fall off a ladder, where the casualty has hit their head and blood is oozing from the left ear.

Your answers may include the following:

- A relative can fetch the casualty and take them home or to their local doctor;
- Call an ambulance. The casualty needs to be transferred in a stretcher.
 If the thigh is broken, there could be major blood loss;
- No further treatment is necessary. Let the casualty rest for a while and then they can resume normal activities;
- Call an ambulance urgently;
- Call an ambulance urgently.

The phone number in Australia for an ambulance is 000, or 112 from mobile phones. This is a call centre style emergency service number. The operator will ask you if you would like the police, fire, or ambulance. If you aren't sure what service you will need, don't panic. The operator will help you.

Using relevant communication media and equipment



Communication systems may include but are not limited to:

- telephones, including landline, mobile and satellite phones;
- SMS;
- HF/VHF radio;
- two-way radio;
- flares;
- flags;
- electronic equipment;
- email;
- hand signals.

The equipment you use to alert emergency personnel will depend on where you are and what equipment is available. The most common way of contacting emergency services is to use a landline phone or a mobile phone.

Learning Activity 10:



You have been called to the following:

- 1. An amputated finger.
- 2. Breathing which has stopped from electrocution.
- **3.** Small laceration to left forearm, with bleeding controlled with pressure bandage and elevation.

4. Dislocated finger.			

Calling '000' Emergency Services



- '000' (triple zero) is Australia's primary Emergency Services number and is used to access emergency assistance (Ambulance, Police and Fire Department) from fixed, mobile and payphones, in the first instance.
- '000' is a 24-hour free call service and all calls to 000 are voice recorded.

112 - The digital alternative



112 is the international standard emergency number that can only be dialled on digital mobile phones. The advantages of using 112 are that it can be dialled anywhere in the world and the number is automatically converted to the local emergency service number, it can be dialled on any network coverage area and does not require a SIM card or the entry of a security PIN number to access and gain connection to Emergency Services. You should check with your mobile service provider if you have any concerns about the correct number to call in an emergency.

106 is the text-based emergency call service for people with a hearing or speech impairment. This service operates using a TTY (teletypewriter) and does not accept voice calls.

106 - The Text Emergency Call Service



If you have a hearing or speech impairment and need to contact Emergency Services, you can lodge an emergency text call by calling 106 directly through your TTY (teletypewriter/textphone) or computer with modem.

For more information, contact Australian Communication Exchange (ACE) on 1800 555 660 (Voice) or 1800 555 630 (TTY).

Both 112 and 106 are secondary emergency service numbers because they are for use only in connection with particular technologies.

Lodging a call to Emergency Services

You should only call an emergency number in a time critical emergency.



- 1. Call 000 (or 112 from digital mobile phones) and tell the operator which service you require, for example, Ambulance, Police, or Fire.
- 2. Give a clear description of the address where the accident has occurred.
- 3. Give the name of the nearest cross street or landmark.
- **4.** State the type of emergency, for example, car accident.
- **5.** State the number of casualties, for example, two adults and one child.
- 6. Describe any special circumstances such as power lines down or flammable fluid spills.
- 7. Provide your contact phone number.

Caution – Calling Emergency Services DO NOT hang up the phone until directed to do so by the Emergency Services operator.

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This record would be sent to management who would then be expected to read and follow up on the incident, including making recommendations to prevent or minimise the incident from occurring again. The record would be kept on the premises for future reference.

Physical condition

When you are recording the details regarding the physical condition of the casualty, you need to write objectively, not subjectively, and include observation of the facts i.e. the signs and the symptoms.

Case Study: sprained ankle



The correct way

An example of writing objectively about the casualty's physical condition is:

At 1.10 pm 1/11/02, (casualty's name) was found by (your name) lying on the floor of the tearoom holding his left ankle. (Casualty's name) stated that he tripped over his untied shoe laces and that his left ankle was very painful. On inspection, his left ankle was swollen and slightly bruised. (Your name) called for help and (first aider's name) arrived on the scene.

The incorrect way

Do not use emotive language when reporting on the casualty's physical condition.

Below is an example of how not to write:

At 1.10 pm 1/11/X2, I went to the tea room because I was hungry, and I was late for my lunch break and I found (casualty's name) lying on the floor. I panicked and ran for help because I thought (casualty's name) had broken his leg. When I returned, I had calmed down and saw that his left ankle was huge. My supervisor took over the first aid management as I wasn't sure what to do.

Changes in conditions

Any changes in the casualty's physical condition also need to be reported, again in an objective manner.

Case Study: Asthma attack



Here is an example of documenting changes in the physical condition:

At 11.20 am 12/5/X2 (casualty's name) was having difficulty breathing, was wheezing and very distressed. She was pale and clammy. (Your name) sat her in a chair and called for help. At the same time (your name) loosened her clothing, opened the window and turned on the fan. Suddenly, (casualty's name) started turning bluish around her mouth.

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Management

It is important that all management given to the casualty is fully documented.



Sprained ankle

(Casualty's name) was helped to the closest chair, his shoe removed, left foot elevated, and an ice pack and a compression bandage were applied to the left ankle.

Asthma attack

(Casualty's name) stated she needed her Ventolin inhaler which (first aider's name) gave to her. (Casualty's name) took four puffs of the inhaler. One minute later, she turned very blue around the mouth and collapsed. She was found to be unconscious and not breathing.

Response to management



In addition to reporting on the physical condition of the casualty and first aid management, you will also need to report on the response to the first aid management. In other words, what happened after first aid was given. Was the first aid management effective? Did the casualty recover?

We will use the two scenarios above to document the first aid management response.

Sprained ankle



(Casualty's name)'s wife was telephoned. She arrived at the workplace at 1.55 pm with a pair of crutches to take (casualty's name) to the local doctor and to have an X-ray. (Casualty's name)'s wife was directed to keep the ice pack on for 20 minutes every two hours for the first 24 hours and for 20 minutes every four hours for the next 24 hours, as well as to keep the left foot elevated and leave the compression bandage in place. She was also asked to phone the workplace the next day to let staff know about (casualty's name)'s condition. Management has also been informed and this report filed.

Asthma attack



(Your name) ran to call an ambulance while (first aider's name) commenced expired air resuscitation. The ambulance arrived at 11.35 am and took over the resuscitation. The ambulance crew took (casualty's name) to Accident and Emergency at St Paul's General Hospital. The family has been informed and will phone us later with an update of (casualty's name)'s condition. Management has also been informed and this report filed.

3.3 Complete applicable workplace, or site documentation, including incident report form



A notifiable incident involves a dangerous incident, or the death, serious injury, or illness of a person.

If a notifiable incident occurs, you must notify us immediately after becoming aware. If an incident is notifiable, the incident site must be made secure, so it's not disturbed until an Inspector attends to conduct an investigation, or you are directed otherwise.

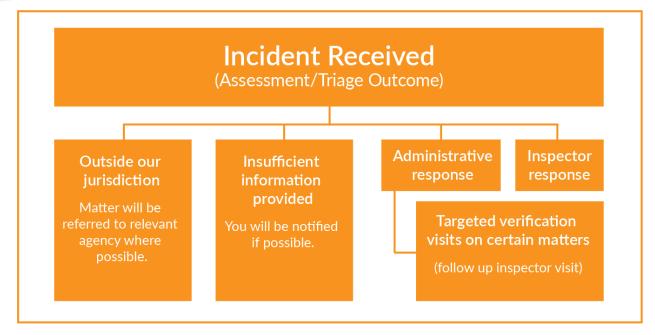
A PCBU may also be required to complete and submit an Incident notification form to the WorkSafe in your state. A PCBU who is required to submit an 'Incident notification form' has 48 hours from the time they notified the incident by phone.

The process

This bulletin sets out what you can expect from WorkSafe and what you can do to assist us when you notify an incident under the Work Health and Safety Act 2011.



Figure 43: Flow chart showing assessment and triaging incidents







Reference Number:				Da	te:		
Person submitting details (if completing form by hand, please print BLOCK letters)							
Name:				Position	า:		
Name of employer/se	elf-employed person notifying:						
ABN:							
Business address: (Not postal address)							
Suburb:			State:			Postcode:	
Work number::		Mobile	number:				
Email address:							
Incident details							
Date of incident:		Time of incid	dent: (am/p	m)			
Death of a person	☐ Serious injury	or illness			Da	ngerous incid	dent 🗌
Name of employer of any Injured or deceased person(s) if different from above: i.e.: subcontractor							
ABN:							
Address or location where the incident occurred:							
Describe the specific location of the incident:							

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Injury/Illness						
Provide a description of any injury or illness						
Did the person receiv	re treatment following the injury/illness? If yes, describe treatmen	nt below	Yes		No	
Action						
Describe any Action t	taken/intended, if any, to prevent recurrence of the incident					
Natifier declarati	·					
Notifier declarati						
	form electronically (signature is not required)					
Notifier signature:		Date:				ļ

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4. Review the incident



- Recognise the possible psychological impacts on self and other rescuers and seek help when required
- 4.2 Contribute to a review of the first aid response as required

4.1 Recognise the possible psychological impacts on self and other rescuers and seek help when required

If you are involved in first aid, it is a good idea to think about ways you can 'de-stress' so that the trauma doesn't have a lasting and detrimental impact upon you.



De-stressing strategies can include:

- debriefing the situation with a supervisor
- writing down what happened and your feelings about it
- talking with a friend or colleague about how it felt to be involved
- doing some exercise to dissipate the adrenaline that might have built up in your system (Most of us have a classic fight or flight response to dealing with conflict and, as a result, have a surge of adrenaline in our systems that acceptable (rational) means of conflict resolution might not deal with.)
- listening to a relaxation tape
- spending time reflecting and getting back into balance by going for a bushwalk, sitting near the water or in the bush
- doing something nice for yourself.

You will all know what works best for you. If your traditional ways of dealing with stress do not work, you might want to seek supervision or counselling yourself to help you to make sense of why the conflict has had a particular impact upon you.

Individuals can take responsibility for their own stress management by taking good care of their general physical and mental health. Improving health for stress management involves:

- Reducing the physical impact of stress by relieving muscle tension, lowering heart rate etc., after stressful experiences
- Improving physical fitness and general health in order to prepare the body to deal effectively with stress next time.

Seven simple strategies that work:

1. Slow down your breathing: Take a few deep breaths, exhaling slowly each time.



Figure 45: Physical Care Program

Before	During	After		
Activities for good health	On the spot relaxation	Activities that relax or that burn energy		
Regular exercise	Posture	Relaxation		
Aerobic	Controlled breathing	Massage		
Weight bearing	Muscle tense and relax	Warm baths		
Flexibility	Venting emotion	Exercise		
Medical check-ups	Time out	Dancing		
Diet	Laughter	Singing		
Sleep	Slow down	Laughing		
Sleep		Venting emotion		
Holidays				

4.2 Contribute to a review of the first aid response as required Your response to the accident/incident



After witnessing an accident or being involved in providing first aid, some people might suffer an immediate or delayed emotional response to the situation. The way people respond might differ but symptoms such as flashbacks, nightmares, depression, and a wide range of physical complaints can occur.

If you have offered first aid, or witnessed an accident, it might be beneficial to seek some form of debriefing or counselling, especially if you suffer from any changes in your physical or emotional health. You can find out about professional counselling and debriefing services through your workplace supervisor, Emergency Services, your local doctor, or community health centre.

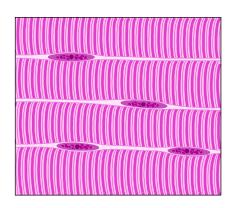
Musculoskeletal System

The Musculoskeletal System comprises of the Muscles and Skeleton which provide structural support and movement for the body.

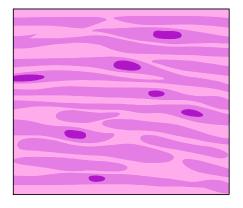
There are three types of muscle:



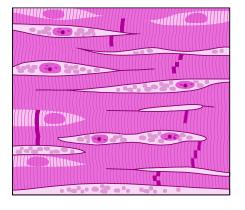
Skeletal **muscle** or "voluntary muscle" is anchored by tendons to bone and is used to affect skeletal movement such as locomotion and in maintaining posture. Though this postural control is generally maintained as a subconscious reflex, the muscles responsible react to conscious control like non-postural muscles. An average adult male is made up of 40-50% of skeletal muscle and an average adult female is made up of 30-40%.



 Smooth muscle or "involuntary muscle" is found within the walls of organs and structures such as the esophagus, stomach, intestines, bronchi, uterus, urethra, bladder, and blood vessels, and unlike skeletal muscle, smooth muscle is not under conscious control.



 Cardiac muscle is also an "involuntary muscle" but is a specialized kind of muscle found only within the heart. The cardiac muscle is a type of involuntary striated muscle found in the walls of the heart. As it contracts, it propels blood into the heart and through the blood vessels of the circulatory system.



The Nervous System



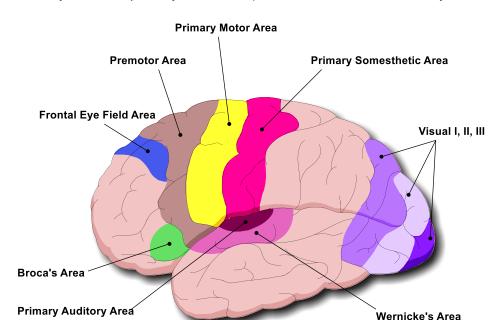
The nervous system comprises the brain, spinal cord and nerves.

The Brain

The brain is enclosed in and protected by the skull. It is a very delicate organ that can be damaged easily. The brain analyses thoughts and functions. The brain stem contains the Medulla Oblongata, which controls the breathing rate and depth, the rate and force of heart contractions and it controls the size of the blood vessels by constricting and dilating.

Figure 47: Areas of the Brain

Below is a lateral view of the brain with 10 different areas (such as primary auditory area and primary motor area) labelled and differentiated by colours.



The Spinal Cord

The spinal cord contains the sensory and motor control nerves(neurons). The spinal cord runs down from the brain, protected by the spinal column and finishes at about lumbar 3 (L3) where it branches off into peripheral nerves.

The Nerves

The peripheral nerves contain motor and sensory nerves, which send and receive electrical impulses. Motor nerves are responsible for transmitting the electrical impulses for muscle movement. Sensory nerves transmit impulses for sight, hearing, touch etc. to the brain.

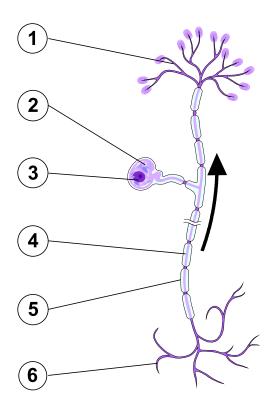
Figure 49: Nerves (Neurons)

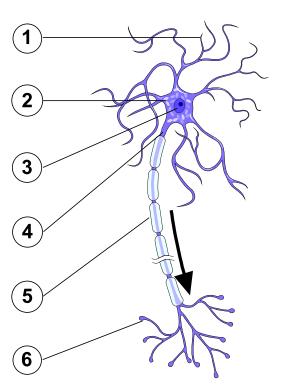


- 3. **Dendrite** a slender, branched projection of a neuron, which conducts the electrical stimulation received from other cells to and from the cell body, or soma, of the neuron from which it projects.
- **g.** Cell body (Soma) the bulbous end of a neuron, containing the nucleus and is where most protein synthesis occurs
- Nucleus controls chemical reactions within the cytoplasm and stores information needed for cellular division
- i. Axon a long slender projection of a neuron which conducts electrical impulses away from the neuron's cell body
- j. Myelin Sheath an electrically insulating phospholipid layer that surrounds the axons of many neurons composed of about 80% lipid fat and about 20% protein. It helps prevent the electrical current from leaving the axon and causing a short circuit in the brain.
- **k.** Axon terminal a specialised structure at the end of the axon that is used to release neurotransmitter and communicate with target neurons.

Sensory Neuron

Motor Neuron



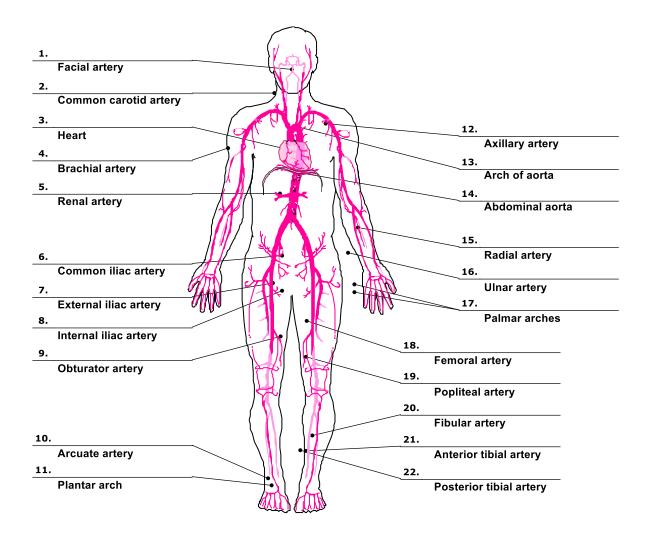


The Circulatory System

The heart, blood vessels and blood make up the Circulatory system.



Figure 51: Major Arteries

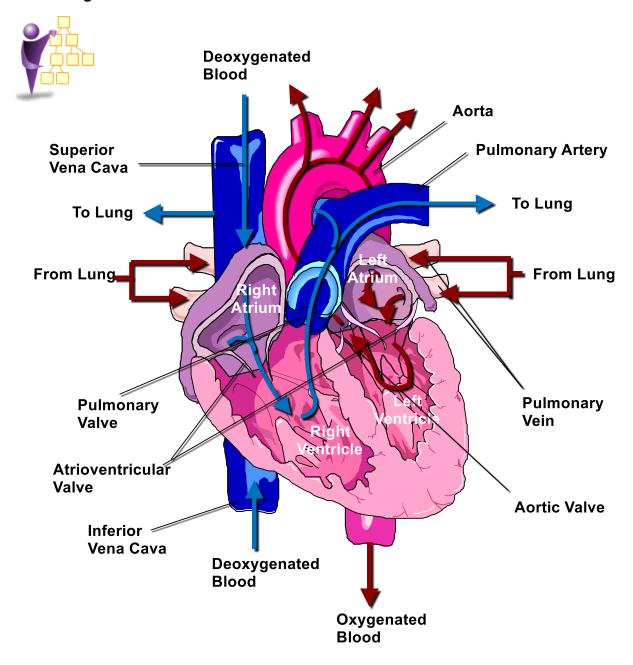


The Heart



The heart is a four-chambered pump. Used blood is returned to the heart via the top (superior) and bottom (inferior) venacarva (largest veins in the body). The blood enters the heart via the right atrium and is then pumped into the right ventricle. Then when the ventricle contracts the blood is then pumped to the lungs for the exchange of oxygen and the removal of carbon dioxide. Once this process is complete, the oxygenated blood returns to the heart via the left atrium and is then pumped into the left ventricle. When the ventricles contract the blood is pumped back into the body via the aorta (the largest artery in the body).

Figure 52: The Human heart and circulation



The Lymphatic System



The lymphatic system is our defence against infections and toxins e.g. Snake bite. The lymph glands are located in the neck, armpits, and groin. As infection/poison travels through the body via the lymphatic system, the lymph glands trap, break down and dispose of the infection/poison. This prevents the infection/poison reentering the circulatory system. When an infection/poison has been trapped by the lymph glands, these glands become swollen, enlarged, and painful.

Figure 54: Lymphatic glands of the neck

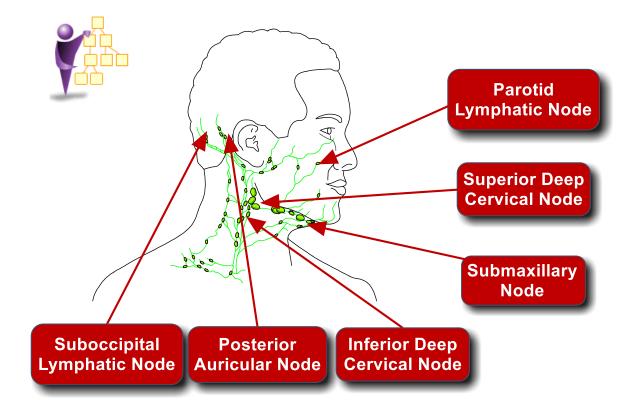


Figure 56: Haematology; Components of blood



