CTAS Education
Empowering the Educator

HLTAID009

Provide cardiopulmonary resuscitation

Student Learner Guide

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Unit of Competency

Application

This unit describes the skills and knowledge required to perform cardiopulmonary resuscitation (CPR) in line with the Australian Resuscitation Council (ARC) Guidelines.

This unit applies to all workers who may be required to provide CPR, 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.

Performance Criteria

Element *Elements describe the essential outcomes.*	**Performance Criteria** *Performance criteria describe the performance needed to demonstrate achievement of the element.*
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 CPR **1.4** Seek assistance from emergency services
2. Perform CPR procedures	**2.1** Perform cardiopulmonary resuscitation (CPR) in accordance with Australian Resuscitation Council (ARC) guidelines **2.2** Display respectful behaviour towards casualty **2.3** Operate an automated external defibrillator (AED) according to manufacturer's instructions

Element *Elements describe the essential outcomes.*	Performance Criteria *Performance criteria describe the performance needed to demonstrate achievement of the element.*
3. Communicate details of the incident	**3.1** Accurately convey details of the incident to emergency services **3.2** Report details of incident in line with appropriate workplace or site procedures **3.3** Maintain privacy and confidentiality of information in line with statutory or organisational policies
4. Review the incident	4.1 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

Foundation Skills

The Foundation Skills describe those required skills (language, literacy, numeracy, and employment skills) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Assessment Requirements

Performance Evidence

Each candidate to demonstrate skills in an environment that provides realistic in-depth, scenarios and simulations to

assess candidates' skills and knowledge.

Due to the nature of this type of training, it is acceptable for the performance evidence to be collected in a simulated environment.

Compression and ventilation skills must be demonstrated on resuscitation manikins following ARC guidelines for the purpose of assessment of CPR procedures.

Assessment must ensure access to:

- adult and infant resuscitation manikins following ARC guidelines for the purpose of assessment of CPR procedures
- AED training devices
- personal protective equipment (PPE).

Simulated assessment environments must simulate real-life situations where these skills and knowledge would be performed, with all the relevant equipment and resources of that workplace or community environment.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors and must hold this unit or demonstrate equivalent skills and knowledge to that contained within this unit.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- guidelines and procedures including:
- relevant ARC guidelines to managing the unconscious breathing and non-breathing casualty and provision of CPR
- potential incident hazards and risk minimisation processes when providing first aid
- infection control procedures, including use of standard precautions and resuscitation barrier devices
- requirements for currency of skill and knowledge
- first aid codes of practice
- appropriate workplace or site procedures relevant to the provision of first aid
- legal, workplace and community considerations, including:
- duty of care requirements
- own skills and limitations

- consent and how it relates to the conscious and unconscious casualty
- privacy and confidentiality requirements
- awareness of potential need for stress management techniques and available support for rescuers
- considerations when providing CPR, including:
- upper airway and effect of positional change
- appropriate duration and cessation of CPR
- appropriate use of an AED
- safety and maintenance procedures for an AED
- chain of survival
- how to access emergency services
- techniques for providing CPR to adults, children and infants including:
- how to recognise that a casualty is unconscious and not breathing normally
- rate, ratio and depth of compressions and ventilations
- correct hand positioning for compressions
- basic anatomy, physiology and the differences between adults, children and infants relating to CPR.

Assessment Conditions

Each candidate to demonstrate skills in an environment that provides realistic in-depth, scenarios and simulations to

assess candidates' skills and knowledge.

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Compression and ventilation skills must be demonstrated on resuscitation manikins following ARC guidelines for the purpose of assessment of CPR procedures.

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Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors and must hold this unit or demonstrate equivalent skills and knowledge to that contained within this unit.

Assessment resources must include:
Adult and infant resuscitation manikins in line with ARC Guidelines for the purpose of assessment of CPR procedures,
AED training device, workplace injury, trauma and/or illness record, or other appropriate workplace incident report form.
Simulated assessment environments must simulate the real-life working environment where these skills and knowledge would be performed, with all the relevant equipment and resources of that working environment.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705

Education and Care Services National Law

The National Quality Framework operates under the Education and Care Services National Law (WA) Act 2012 and the Education and Care Services National Regulations 2012.

National Regulation 136

The approved provider of a centre-based service must ensure that the following qualified people are **at all times in attendance** at any place children are being educated and cared for by the service and immediately available in an emergency:

- at least one staff member or one nominated supervisor of the service who holds a current approved first aid qualification
- at least one staff member or one nominated supervisor of the service who has undertaken current approved anaphylaxis management training
- at least one staff member or one nominated supervisor of the service who has undertaken current approved emergency asthma management training.

Services must have staff with current approved qualifications on duty at all times and immediately available in an emergency. One staff member may hold one or more of the qualifications.

Australian Resuscitation Council (ARC)

The Australian Resuscitation Council produces guidelines to meet its objectives in fostering uniformity and simplicity in resuscitation techniques and terminology.

Currency

Both the Australian Resuscitation Council and the Safe Work Australia First Aid in the Workplace Code of Practice recommend that all those trained in CPR should refresh their CPR skills at least annually.

The Safe Work Australia First Aid in the Workplace recommends that first aiders attend training on a regular basis to refresh their first aid knowledge and skills and to confirm their competence to provide first aid. Safe Work Australia recommends that first aid qualifications, anaphylaxis management training and emergency asthma management training should be renewed every three years.

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 CPR

1.4. Seek assistance from emergency services

1.1 – Recognise and assess an emergency situation

By the end of this chapter, the learner should be able to:

- Understand what constitutes an emergency
- Recognise smells, sounds, and sights that can be indicators of an emergency situation
- Be vigilant for signs that indicate an individual is in an emergency medical situation
- Understand how recognising an emergency begins the chain of survival.

An emergency is one which poses an immediate risk to the health and life of individuals or risk to the environment or property. Most emergency situations require intervention to stop the situation from becoming worse. Unfortunately, in some situations, this is not possible and so care after the calming or end of the situation is the only possibility.

It is important to know how to recognise an emergency as this will enable an appropriate response that potentially, could save the life of another. You must know the difference between a medical emergency and an injury as the appropriate response to these can differ greatly.

Recognising an emergency situation

Unless you are present at the scene and are acutely focused on the person in need of emergency assistance, you may be unaware of the need for it. However, using your senses, you can identify signs that may require investigation, where there may be someone in need of emergency medical assistance.

The following are things to look out for:

- Noises
  - distressed noises – screams, cries, yells, calls for help, moans
  - alarming noises – breaking glass, screeching tires, crashing
  - loud, abrupt noise out of the blue
  - no noise when there usually is
- Smells
  - fumes (other than everyday ones e.g., petrol)
  - out of the ordinary/strong smells
- Sights
  - crashed vehicles
  - spillages
  - broken things
  - evidence of scuffles/disturbances/commotion

- Abnormal behaviour
    - sudden collapsing
    - slurred, hesitant or muddled speech
    - difficulty breathing
    - clutching of chest/throat
    - confused/distressed behaviour
    - abnormal skin colour (flushed, pale, bluish)
    - sweating (for no apparent reason).

Examples of emergency situations

There are a range of emergency situations that can cause harm to an individual and may require emergency service assistance. Whilst these situations can be life-threatening, not all of them will require CPR.

Examples of emergency situations include:

- Unconscious patients
- Heart attacks
- Motor vehicle accidents
- Abdominal pain
- Breathing difficulty
- Severe back pain
- Choking
- Industrial accidents
- Suicide attempts
- Severe vaginal bleeding
- Diabetes
- Electrical shock
- Burns
- Convulsions/seizures/fitting
- Drowning
- Stroke

- Severe trauma
- Hyperthermia
- Hypothermia
- Severe headaches.

Recognising an individual who has a medical emergency that requires CPR

To provide cardiopulmonary resuscitation (CPR) effectively and appropriately, you need to know the signs exhibited (or not exhibited) by an individual that indicate the individual needs that form of emergency medical assistance.

Signs that someone requires CPR include:

- They do not respond when you talk to them or touch them firmly (unconsciousness)
- Their breathing is not normal when you tilt their head back and listen, feel or look for normal signs of breathing.
- They are not breathing at all (no breathing when head is tilted, chest is not rising and falling)
- They have no pulse.

Chain of survival

The chain of survival is a 4-link process which seeks to ensure that assistance given to a casualty has the greatest chance of preserving their life. Recognising an emergency is the starting point of the chain.

The four links in the chain are:

- Early access – contacting the emergency services swiftly to ensure the casualty can receive specialist medical care
- Early CPR – assessing the need for CPR and administering it quickly greatly increases the chance of survival following cardiac arrest and it maintains blood flow to vital organs
- Early defibrillation – use of a defibrillator can prevent an unusual heart rhythm and also enable the heart to regain a normal beat

- Early ALS – advanced care life support is the process of paramedics giving casualties specialist cardiac drugs to help stabilise them and provide them with assistance prior to arriving at a hospital.

Implementing and aiding in the chain of survival being successfully carried out can drastically increase the chance of a casualty surviving a cardiac arrest.

The four links will be expanded upon in the following chapters so that the actions you need to undertake can be fully understood.

Activity

1. Identify three types of noises that may alert you to an emergency situation.

2. Identify three signs that someone requires CPR.

1.2 – Ensure safety for self, bystanders, and casualty

By the end of this chapter, the learner should be able to:

- Adhere to the Workplace Health and Safety Act to minimise hazards
- Recognise immediate hazards that can endanger themselves and others when trying to administer CPR
- Undertake an infection control procedure when administering CPR.

Upholding health and safety in the workplace is the best way to prevent an emergency and thus, the need to administer CPR. Having rigorous policies and procedures underwritten by law should ensure that the likelihood of an emergency occurring is minimal.

Duty of Care

Duty of care is a legal obligation for you as a First Aider to protect yourself and your casualty when providing first aid

When a First Aider has made the decision to provide first aid to a casualty and they have commenced the treatment, this means that they are committed to provide a duty of care to the casualty. Duty of care in first aid means that you will provide reasonable treatment to the casualty to the best of your ability and to the level of training you have had.

The First Aider is committed to providing duty of care until:

- Another or more experienced First Aider takes over.
- Medical aid arrives.
- You are physically unable to continue to provide first aid; or
- The situation becomes unsafe to do so.

A duty of care can be breached by either action or inaction (for example, if you do nothing and the person in your care gets worse). In the workplace the employer has a duty of care to ensure that appropriate numbers of First Aider(s) have been appointed.

1. When giving first aid, stay within the scope of your training.

2. Once you commence giving first aid, you automatically take on a duty of care.

3. Complete required documentation and keep it confidential.

4. Maintain your skills and knowledge. Every year the HLTAID009 (CPR) unit is recommended to be refreshed and every three years the full HLTAID012 (First aid in an education and care setting) requires to be completed.

5. Maintain first aid kits and equipment in the workplace.

Hazards and risks

A hazard is something that has the potential to harm a person, such as machinery, manual work tasks, chemicals, or cramped workspaces. A risk is the likelihood that harm might occur because of the hazard.

Example:

- The use of chemicals in the workplace is a hazard.
- The possibility of spills, chemical burns or fume inhalation are the risks.

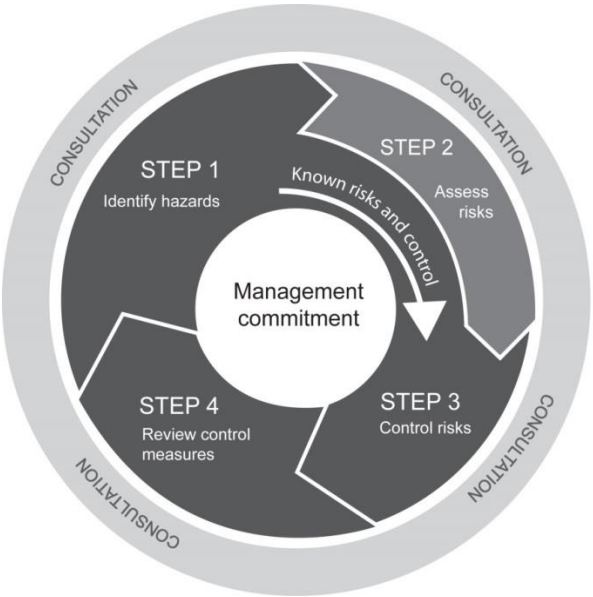
Identifying, assessing, and managing immediate hazards

As well as recognising when first aid is required, you need to identify, assess, and manage any hazards that could pose immediate safety risks to people.

The following information from this section has been written in accordance with guidance from *How to Manage Work Health and Safety Risks: Code of Practice* (December 2011), Safe Work Australia. Some content has been quoted directly from this source.

Risk management

'Risk management' is the term used to describe the process of identifying, assessing and controlling risk. It may be represented by the following graphic:



Source: 'Identify, assess and control hazards' | Safe Work Australia, https://www.safeworkaustralia.gov.au/risk (12/06/17)

Identifying hazards

To identify hazards, you must:

- Inspect the environment
  - is the space safe? E.g., no obstructions, loose wiring, spills, etc.

- if in a workplace, are tools and equipment fit-for-purpose and well-maintained?

- Consult others (verbally or via survey)
  - have there been any occurrences of near-misses or unreported incidents?
- Review available information
  - what information has been published by regulators, industry associations, unions, technical specialists, safety consultants, etc. about this environment or activity?

Assessing risk

A risk assessment may be carried out in situations where the risk of a hazard is unknown, or where there is no legislation, code of practice or well-known and commonly used risk controls that can be implemented. It may also be carried out to determine what type of risk of how great a risk may be present, or how different hazards might interact to create new or greater risks.
You may have access to a risk assessment template that is used in your workplace or community environment which will provide guidelines for how to assess hazard risk. Otherwise, the following questions may be asked:

- What type of harm could occur from the hazard, and how serious could this harm be?
- Are there factors which influence how serious a harm could be?
- How many people does the hazard affect, or could affect?
- How are hazards related? Could there be a domino-effect of risk? For example, exposed electrical wiring and a fire exit door that doesn't open?
- Are there hazards that could cause risks to quickly escalate? For example, in the case of a fire, are there lots of flammable materials that could make the fire grow quickly?

The second part of assessing risk is to assess likelihood of harm occurring.

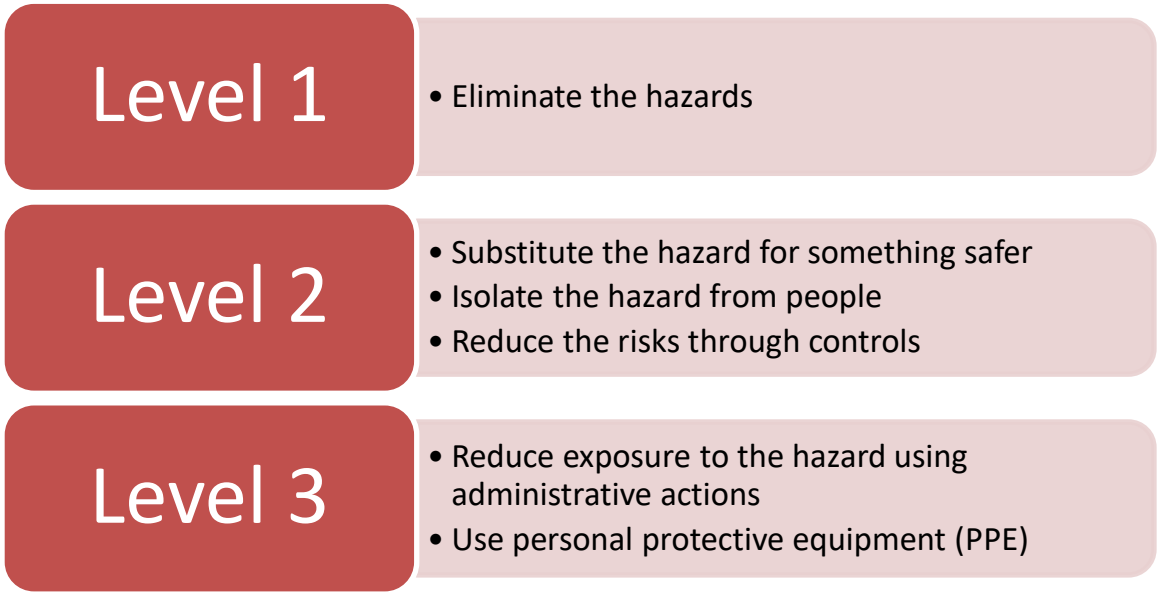
A table such as the following may be completed for this purpose:

Question	Answer
How often are people exposed to the hazard?	

How long might people be exposed to the hazard?	
How effective are current controls in reducing risk?	
Could any changes in your organisation increase the likelihood?	
Are hazards more likely to cause harm because of the environment?	
Could the way people act and behave affect the likelihood of a hazard causing harm?	
Do the differences between individuals in the environment make it more likely for harm to occur?	

Managing risk

Risk must be managed in accordance with the hierarchy of risk control, as pictured below:



Level 1 controls are the most reliable and the most likely to provide protection. Level 3 controls are a last resort.

Safe manual handling techniques

As a first aider, you may be required to engage in manual handling tasks to reposition or move casualties or equipment.

To lift heavy items of equipment safely, you should lift from the legs with straight arms and back.

For non-serious injuries and conditions, the rescuer may ask the person to move themselves or to assist the rescuer to move them.

For serious injuries and incidents, the person should not be moved unless absolutely necessary, as this may cause further harm.

Types of hazards

Before you act and administer any first aid, you need to check for any immediate danger.

The types of issues you need to look out for include:

- **Gas** – risk of explosion, deprivation of oxygen (asphyxiation)
- **Electricity** – are any pools of water live? Is there a risk of electrocution?
- **Fire** – Is there fire between you and the victim? Never open doors if you expect there is fire behind them – wait for emergency assistance.
- **Assault** – is there an assailant who wounded the victim? Are they nearby and are people at risk of being attacked?

- **Blood** – avoid all unnecessary contact with bodily fluids. Wear gloves and face masks, if possible.

Work Health and Safety (WHS) Act

The WHS Act was established to provide a framework to protect workers in terms of health, safety, and welfare.

It does this by:

- Eliminating and minimising risks in the workplace
- Ensuring appropriate and fair consultation on resolving health and safety issues
- Encouraging unions and employer organisations to act upon consultation
- Assisting workers and businesses to achieve healthy and safe working environments
- Promoting information, education, and training on work health and safety
- Providing compliance and enforcement measures
- Delivering continuous improvement.

It ensures that all workplaces should have trained first aid personnel on hand – they needn't be extra employees but can merely be existing ones who you train up and give the extra responsibility to. The 'First Aid in the Workplace' Code of Practice (drawn up by Safe work Australia) can be found at www.safeworkaustralia.gov.au – it is a model Code of Practice for providing workplace first aid in a safe manner and is approved under the WHS Act.

The Workplace Health and Safety Act is preventative legislation that has been created for the purpose of minimising the likelihood of emergency situations arising. However, such situations can still arise and you need to be prepared in case they do. A breach of Workplace Health and Safety can cause harm to another and leave a lasting hazard for anyone attempting to provide them with medical assistance.

Infection control procedure

Infections are caused by pathogens including bacteria and viruses meeting the body, either internally or externally. Not all infection is apparent immediately and it can take time to see symptoms of infection on a person. Infection control procedure in the workplace is governed by the Occupational Health and Safety Act (2004) and aims to prevent pathogens being spread in the first place. Infections can be a serious hazard to the health and safety of individuals and so steps must be taken to control the risk both from a basic hygiene perspective and in the event of an emergency.

When a person is harmed at work, providing them with CPR must be done with consideration of any infection control procedures that are in place and maintaining the health and well-being of the persons involved.

Infections can be transmitted via:

- Air e.g., influenza
- Contaminated objects and food, e.g., salmonella
- Skin to skin contact such as herpes simplex (cold sore)
- Bodily fluids, for example, HIV.

To reduce to risk of infections spreading during the administration of CPR:

- Wear gloves to prevent contact with the victim's saliva
- Wear safety glasses to protect your eyes from vomit, blood, or any other bodily fluids
- Use a barrier device so that you do not need to come into direct contact with the victim's mouth.

1.3 – Assess the casualty and recognise the need for CPR

By the end of this chapter, the learner should be able to:

- Understand the steps of and be able to carry out the DRSABCD check
- Use stimuli to ascertain whether a person is conscious
- Accurately assess whether a person is breathing normally, if at all
- Check an individual's pulse accurately
- Place individuals who are breathing but unconscious into the recovery position.

DRSABCD check

When assessing any casualty, you should carry out the DRSABCD Primary Survey. This will enable you to establish the level of assistance needed, identify the nature of the problem, and begin implementing the chain of survival.

The DRSABCD Primary Survey entails:

- **Danger** – you must check that there is no immediate danger to yourself or the person. You need to assess whether it is safe for you to enter the area to resuscitate them e.g. they are drowning
- **Response** – you need to check if they respond to stimuli – ask them questions such as: "can you open your eyes?" or "can you hear me?" Then, gently shake their shoulders and see if they respond. If they respond, you should leave them in their current

position and summon help; monitor their vital signs and treat any conditions, such as wounds, until help arrives or they recover. If there is no response, you should shout for help and follow the steps below

- **Send for help** – call 000 for an ambulance, or get someone else to make the call for you
- **Airway** – now you should open the airway. Place one hand on the forehead and use two fingers to lift the chin (moving the tongue away from the back of the casualty's mouth). If need be, you may have to turn them on their back to open the airway. If there is foreign material in their mouth then open it, place them in the recovery position and clear their airway with your fingers

- **Breathing** – put your cheek close to their mouth; look, listen and feel for up to ten seconds – you should be checking to see if:
    - their chest is rising and falling
    - you can hear them breathing
    - you can feel the breath on your cheek
- **CPR** – If they are not breathing then start CPR at a ratio of 30 chest compressions for two breaths. Continue this until help arrives, or the person recovers
- **Defibrillation** – if the patient is still not recovered then apply the defibrillator and follow the voice prompts

Assessing consciousness, breathing and pulse

Knowing whether an individual is conscious or not and whether they are breathing are the key factors in establishing whether CPR needs to be administered.

When an individual appears unresponsive you can:

- Attempt to rouse the person with a loud noise, most commonly this is through yelling to the casualty such things as 'what is your name?'
- If the casualty does not respond, then the next step is to apply a painful stimulus to the body. Unless you suspect the casualty has sustained a chest injury, the best way to do this is to make a fist and rub up and down the individual's sternum vigorously.

If neither of these actions produces a conscious response from the individual, then this can indicate that CPR is required. If the casualty is unconscious but is breathing normally, then CPR may not be required.

To ascertain the status of a casualty's breathing:

- Closely monitor their chest to see if it is rising and falling consistently
- Place your ear next to their mouth or nose and listen carefully for sounds of breathing. You may also be able to feel their breath on the side of your face
- If listening for breathing, always position your gaze to their chest as this is the easiest way to check for breathing, especially if you are in an emergency and there is lots of commotion.

If the casualty is non-responsive and does not appear to be breathing properly if at all, then it is highly likely they need CPR. The last check that can be carried out before the need for CPR is confirmed is on their pulse.

A casualty's pulse can either be checked by placing your index and middle finger either on the underside of their wrist or on the side of the neck, approximately an inch below their ear. Always check for a pulse on the side of the body you are situated as reaching over can cause a casualty to panic if they suddenly regain consciousness. If there is no pulse, especially if there is also no breathing, then CPR should be commenced immediately.

The recovery position

This is the position that you should place all unconscious but breathing people into if they have no life-threatening conditions present and it has been established that CPR is not necessary. It ensures that their airway remains open and prevents choking from vomiting or other fluid.

To successfully place an individual into the recovery position:

- Kneel beside the casualty
- Place the arm closest to you at a right angle to their body. The hand should face upwards to their head
- Place their other hand under their cheek, with the back of their hand touching the skin

- Bend the knee furthest away to a right angle
- Pull on the bent knee to roll them onto their side; the bottom arm will stop you rolling too far and the other will support the head
- Tilt their head back and lift their chin to open the airway; check to see that nothing is blocking it
- Stay with the person and monitor their breathing and pulse until help arrives
- After thirty minutes, turn them onto their other side (if injuries allow).

Chain of survival

The 'chain of survival' refers to the series of steps that, together, will give the best chance of survival to a person who has experienced a cardiac arrest (a heart that's stopped beating).

These steps are:

- Early recognition and call for help – to prevent cardiac arrest
- Early CPR – to buy time
- Early defibrillation – to restart the heart
- Post-resuscitation care – to restore quality of life.

Source: St. John Ambulance Australia, https://www.stjohnsa.com.au/shop/defibrillators (05/07/17)

These steps are represented in the following graphic:

Image source: St. John Ambulance Australia, https://www.stjohnsa.com.au/shop/defibrillators (05/07/17)

If the person appears to have suffered a cardiac arrest, these are the steps you should follow to give them the best chance of survival.

The appropriate responses for less serious medical emergencies are detailed in the rest of this chapter.

Phoning an ambulance

Emergency services are a resource to be used when there is a life-threatening situation with the person you are treating or if the situation is beyond the capabilities and training of your first aid personnel.

If this is the case, the first aider should arrange for someone else to fetch the required resources and phone the ambulance – they should focus their efforts on first aid procedures. However, if they are alone, they will need to make the call themselves.

The numbers to call are:

- 000 – from all landlines, mobile phones, and payphones
- 112 – from GSM mobile phones (can also be used with regular mobile phones)
- 106 – for a text-based service (for deaf people, those with hearing difficulties and speech impediments). Note – it doesn't use text messaging, but a teletypewriter.

To make the call:

- Dial 000 from a safe place and remain calm
- State the service you require when asked by the operator
- Provide location information, if requested. This includes:
  - street name, house number, nearest cross street, and relation to other locations
  - distance from landmarks and roads (for rural areas)
  - wait outside an arranged meeting point for emergency services – assist them in finding the location
  - if the call is made when travelling in a car – tell them the direction you are travelling and any exits or towns you passed through close to the incident (to narrow down the location)
- Tell the nominated emergency service operator the details of the incident
- Remain on the phone, speak as clearly as possible and answer any questions asked.

Activity

1. Outline the steps of DRSABCD

2. What steps would you follow to put a casualty in the recovery position?

1.4 – Seek assistance from emergency services

By the end of this chapter, the learner should be able to:

- Call emergency services quickly in an emergency
- Relay information in a calm, clear manner
- Follow instructions given by emergency service personnel until an ambulance arrives.

If you have established that CPR is required, then you should call the emergency services on 000 and request an ambulance. If you are the only person in the vicinity trained to provide CPR then getting someone else to call the services can mean that you can begin CPR even more quickly.

Relaying information

When calling the emergency services, be prepared to provide accurate information about the situation, the casualty, and their condition. This will ensure that the emergency services can reach you quickly and be prepared to take over from you upon their arrival.

When talking to the emergency services, stay calm, don't shout, and speak slowly and clearly to make sure that the handler on the other end of the line is receiving accurate information.

Information that may be requested by the call handler could include:

- Location

- When casualty was identified
- Sex of casualty
- Approximate age of casualty
- Any visible injuries
- Nature of emergency, if known
- Medical assistance already delivered
- Vital signs
- State of consciousness
- Medical history of the casualty, if known.

Following instructions

Once you have provided information about the situation and the individual to the emergency service personnel, they may request that you stay on the phone whilst they relay instructions. If this is the case, then make sure you listen carefully and stay calm, doing what they say as they say it.

They may also require you to stay on the phone if they believe that the casualty's condition is not stable, and they need constant updates about the situation. When this is necessary ensure that you are monitoring the individual closely and explaining any changes as accurately as possible.

They may also end the conversation but request that certain actions are undertaken so that they can reach the casualty as quickly and as easily as possible once they reach your location.

Requests they may make include:

- Calling again if the casualty's condition changes
- If for any reason, your location changes
- Ensuring doors are open and there is a clear indication of where paramedics are needed:
    - individual at the entrance to the premises
    - large house/premises number easily visible from the road
    - lights on if it is dark
- Gathering any medication they may have with them
- Writing down the address of the casualties GP
- Ensuring that if a lift must be used it is waiting at the floor the paramedics will need to enter on
- Removing any obstacles and making sure there is a clear path to the casualty.

If you a required to move obstacles for the casualty to be accessed quickly and properly, ensure you employ the correct manual handling techniques.

It is important that you think about your own safety and use safe moving and handling principles:

- Keep your back straight and bend at the knees when lifting
- Do not stoop, kneel beside the casualty when rolling them into recovery position
- Try not to lean over or twist awkwardly
- Get assistance from other people.

2. Perform CPR procedures

2.1. Perform cardiopulmonary resuscitation (CPR) in accordance with Australian Resuscitation Council (ARC) guidelines

2.2. Display respectful behaviour towards casualty

2.3. Operate automated external defibrillator (AED) according to manufacturer's instructions

2.1 – Perform cardiopulmonary resuscitation (CPR) in accordance with Australian Resuscitation Council (ARC) guidelines

By the end of this chapter, the learner should be able to:

- Perform chest compression only CPR
- Perform chest compressions and rescue breaths CPR
- Perform CPR on adults, children, and babies
- Recognise their own skills and limitations with regards to administering CPR
- Know how to react if the casualty vomits or regurgitates.

Performing CPR

CPR is performed on people in need of resuscitation. It is a technique employed to pump oxygen around the body via chest compressions and rescue breaths.

According to ANZCOR Guideline 6 (Australian Resuscitation Council), unresponsiveness and absence of normal breathing will indicate the need for resuscitation.

The steps/aspects of CPR are as follows:

- Checking for response and normal breathing
- Recognising abnormal breathing
- Opening and clearing the airway
- Using correct hand location, compression depth rate in line with the ARC recommended ratio of compressions and ventilations
- Acting in the event of regurgitation or vomiting
- Following single rescuer procedure, including the demonstration of a rotation of operators with minimal interruptions to compressions.

Checking for response and normal breathing

The first thing you need to check is if the person is unconscious.

To do this, you must complete the DRSABCD check:

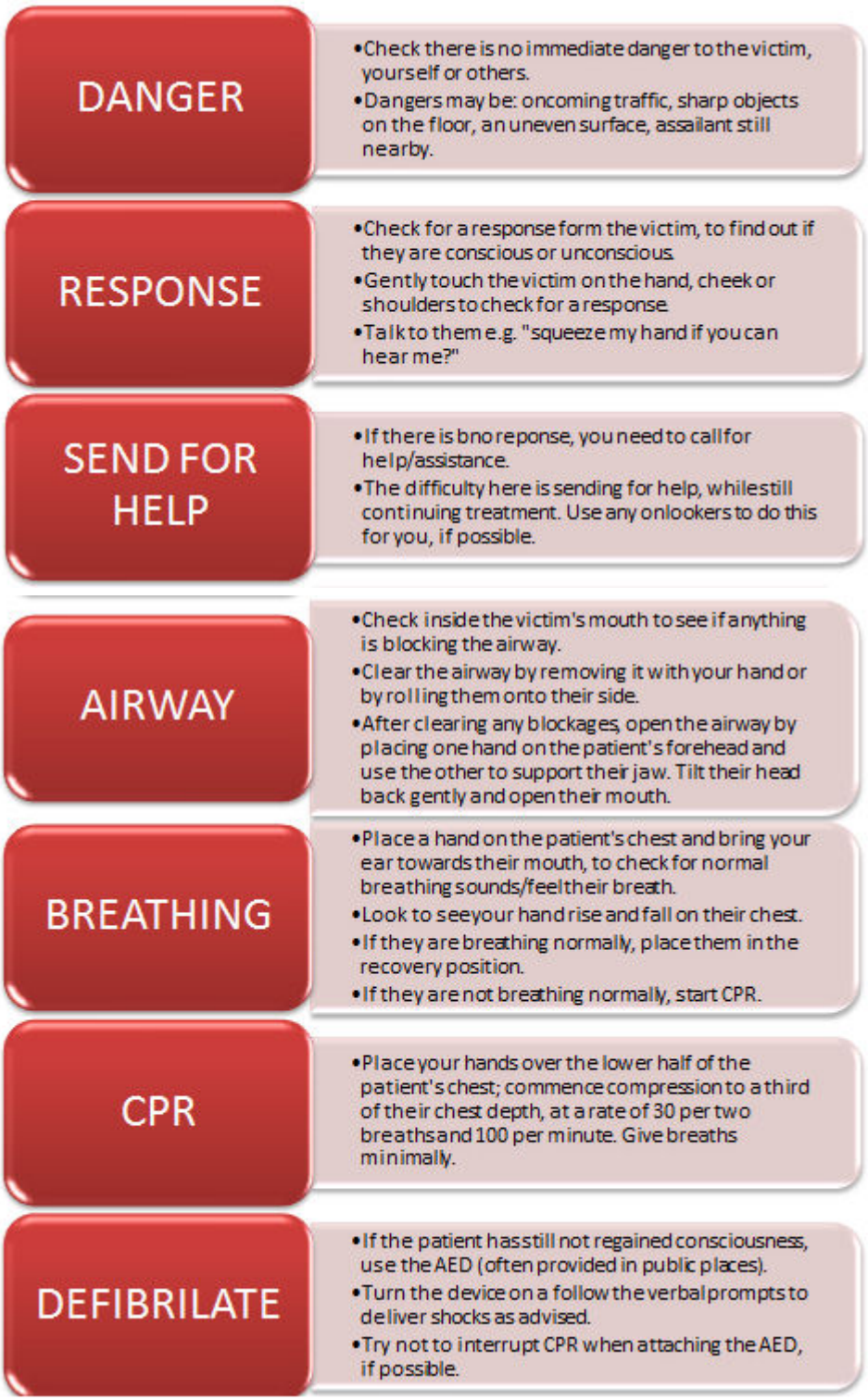
- **Danger** – you must check that there is no immediate danger to yourself or the person. You need to assess whether it is safe for you to enter the area to resuscitate them e.g., they are drowning
- **Response** – you need to check if they respond to stimuli – ask them questions such as: "open your eyes?" or "can you hear me?" Then, gently shake their shoulders and see if they respond. If they respond, you should leave them in their current position and summon help; monitor their vital signs and treat any conditions, such as wounds, until

help arrives, or they recover. If there is no response, you should shout for help and follow the steps below

- **Send for help** – call 000 for an ambulance, or get someone else to make the call for you
- **Airway** – now you should open the airway. Place one hand on the forehead and use two fingers to lift the chin (moving the tongue away from the back of the casualty's mouth). If need be, you may have to turn them on their back to open the airway. If there is foreign material in their mouth, open it, place them in the recovery position and clear their airway with your fingers
- **Breathing** – put your cheek close to their mouth; look, listen and feel for up to ten seconds – you should be checking to see if:
    - their chest is rising and falling
    - you can hear them breathing
    - you can feel the breath on your cheek
- **CPR** – If they are not breathing, start CPR at a ratio of 30 chest compressions for two breaths. Continue this until help arrives, or the person recovers
- **Defibrillation** – if the patient is still not recovered, apply the defibrillator, and follow the voice prompts.

DRSABCD

It can be summed up in the diagram on the following page:



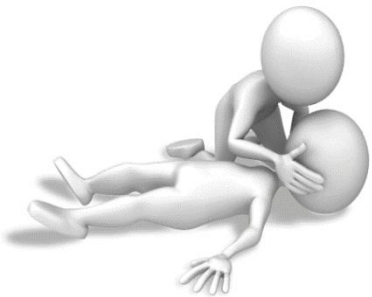
AED (Automated External Defibrillator)

The next step is to apply AED (Automated External Defibrillator) treatment. You must first remove any metal jewellery and medication patches.

Now, remove the electrode pads from their packets; follow the instructions on the pads and place them on the unconscious person's chest.

Then, follow these steps:

- Do not touch the unconscious person's body
- Tell everyone to stand clear
- Stop CPR at this point
- The AED will analyse their heart rhythm
- From this, it will determine the need for shocks; it will charge and issue a voice prompt
- Check once again that everyone is clear
- Now, press the shock button
- Expect the person to 'jump' when they are shocked
- Continue to follow the voice prompts delivered by the AED
- Continue with this treatment unless:
    - emergency help arrives to take over
    - they show signs of regaining consciousness such as movement/breathing
    - you become unable to physically continue.



Rescue breaths

These should be performed if the person is lying unconscious and not breathing, with lips and fingernails having turned a blue colour.

These are the steps for how to perform them:

- Pinch their nose and lift their chin
- Place your mouth over their mouth and make a lip seal
- Blow a slow, firm breath every five seconds (for adults) or three seconds (for infants). Make sure that the chest is rising with each breath; if not, reposition the head
- Wait 5–10 seconds before checking for breathing again
- Continue the process until they are breathing again (or emergency help arrives).

For infants, mouth-to-nose rescue breaths may be used. In this instance, the rescuer's hand should close the infant's mouth, and the breath should be delivered through the infant's nose. If there is an obstruction, the mouth-to-mouth method may be used.

Agonal breathing

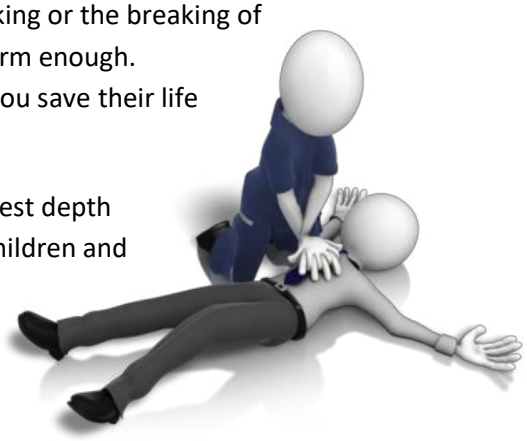
After sudden cardiac arrest, the person may experience irregular gasps for breath. This should not be mistaken for normal breathing having resumed and chest compression and rescue breaths should be started as soon as possible.

Correct hand location and compression depth rate

You need to comply with Australian Resuscitation Council (ARC) guidelines when attempting chest compressions on unconscious persons.

First, you must locate the area for chest compressions – place your hands on the lower part of the sternum; place the heel of the hand in the centre of the chest with the other hand on top. For children, one hand compressions may be used. For infants, two fingers should be used for compressions instead of a hand.

You should avoid interruptions to chest compressions, complete them with the victim on a firm surface and maintain a rhythm (so there is equal time for compression and relaxation). Don't rock the victim backwards or forwards, thumps or quick jabs. You may even hear cracking or the breaking of ribs – this is merely reassurance that the compressions are definitely firm enough. Remember the concept of "life over limb" – it is more important that you save their life than worry about breaking any bones.



The lower half of the sternum should be depressed one-third of the chest depth per compression – on average, this is five centimetres for adults and children and four centimetres for infants.

For the rate of compressions, they should complete about 100 compressions per minute (nearly two each second). However, this is only the speed of compression as opposed to the actual number of compressions that will be completed – you need to allow time for rescue breaths. Going quicker than this speed delivers no advantage, however.

Acting in the event of regurgitation or vomiting

First off, vomiting and regurgitation are not the same things. Regurgitation is caused by chest compressions and rescue breathing – it causes fluid to gather in the mouth and upper airway. It is a passive action and not a bodily reaction. Vomiting, however, is an active, muscular action which is caused by the stomach 'throwing up' its contents.

If the person vomits during CPR, you need to roll them over and clear the airway; then, reassess the ABCs (airway, breathing, circulation). If the vomiting continues and signs of revival begin, you can stop the CPR and check for a pulse.

If they regurgitate during CPR, you should:

- Finish the thirty compressions
- Roll the patient and clear the airway
- Give two rescue breaths
- Reposition the victim and resume CPR
- Do not pause and reassess vital signs as it is not a change in victim status.

Rotating CPR personnel

To prevent fatigue and maintain the effectiveness of chest compressions over an extended period of time, it may be necessary to rotate operators. This is common practice in hospital emergency rooms; if you are with someone else who is trained in CPR, switching between compression cycles and rescue breaths is a good guide (or every two minutes).

ARC guidelines

Complete ARC guidelines can be found on the Australian Resuscitation Council website. You should access and read these thoroughly to further inform your learning.

They are accessible here: https://resus.org.au/guidelines/ (12/06/17)

Cardiopulmonary resuscitation is the process of chest compressions and rescue breaths which temporarily maintain blood circulation in the casualty to preserve brain function until specialised treatment can be administered.

The Australian Resuscitation Council (ARC), which is overseen by the Australian and New Zealand Committee on Resuscitation (ANZCOR), provides guidelines for the delivery of CPR on an individual who is unresponsive and not breathing normally.

The guidelines state:

- The compression-to-ventilation ratio should be 30:2 for all ages.
- Chest compressions should be provided at a rate of approximately 100-120 a minute.
- The person performing CPR should aim to minimise disruptions to chest compressions.

The ARC also stipulates that CPR should be continued until:

- The casualty begins breathing normally again and/or becomes conscious
- Authorised personnel tell you to stop
- Authorised personnel arrive to take over

- You physically cannot continue due to exhaustion.

Source - Australian Resuscitation Guidelines: The ARC guidelines:

https://resus.org.au/guidelines/

Chest compressions and rescue breaths

CPR should be started quickly but only after the area has been assessed for immediate dangers, the casualty has been thoroughly assessed and the emergency services have been called and informed of the situation.

To perform chest compressions:

- Place the casualty on their back, only if there is no suggestion or signs of spinal injury
- Tilt their head back to open their airways by using your palm against their forehead and gently pushing their chin
- On the sternum of the casualty, place the palm of one of your hands approximately two inches above where the lower ribs meet. Ensure the palm is placed exactly between the nipples
- Palm down, place your second hand on top of the first hand and interlock your fingers
- Position yourself so that your body is directly above your hands. Make sure your arms are straight, elbows are locked, and you are using your body strength to push down
- Complete 30 chest compressions. These should each be around 5cm in depth and done in relatively quick succession.

To perform rescue breaths:

- Ensure the airways are still open by placing your palm on the casualty's forehead, your index and middle finger on their chin and gently tilting their head back
- Keeping the airways open, remove your fingers from the casualty's chin and use them to pinch their nose closed
- Make a seal over the casualty's mouth with your mouth (this can also be done with a barrier device)
- Breathe out slowly for 1 second and look for the casualty's chest rising
- Repeat this for a second time.

This CPR cycle of 30 chest compressions and 2 rescue breaths should be continued until medical help arrives. If during the rescue breaths, you cannot see the chest of the casualty rising and falling they may

have an obstruction in their airways which needs to be removed using the Heimlich manoeuvre. There may be reasons that rescue breaths are not possible curing CPR in which case chest compressions only are sufficient and should be continued at a rate of 100 per minute.

Anatomical differences between babies, children, and adults

Those performing CPR should be aware of the anatomical differences between children and adults.

It should be known that:

- Infants have more flexible bones, which tend to bend instead of break
- The heart and organs of infants fill a greater portion of their abdomens and chest cavities; this makes it harder for them to take deep breaths when in respiratory distress, causing them to breathe faster instead
- Infants are more prone to hypothermia because their body surface area-to-volume ration is greater than that of an adult.

In addition, it should be known that infants are more prone to choking because:

- Infants have larger tongues (in ratio to their mouths)
- Infants have narrower airways (tracheas)
- Infants' epiglottis (the flap of skin under the back of the tongue) is more prone to swelling.

The above points constitute differences between an infant's airway and an adult one.

In addition, the infant respiratory system differs from an adult one, as:

- Infants and young children have fewer fatigue-resistant fibres in their respiratory muscles, which causes them to exhaust more quickly than adults.
- Their ribs are positioned more horizontally, so when they breathe, their ribs move only up, instead of up-and-out
- The diaphragm is very important in an infant's respiratory system
- Young children have a higher oxygen demand than adults.

For more information on how children's anatomy differs from an adult, please read the article 'How are children different' by The Royal Children's Hospital, Melbourne; available here: http://www.rch.org.au/paed_trauma/manual/11_How_are_children_different/ (accessed 10/08/17).

Normal clinical values for children

The following table summarises the normal clinical values for children aged six months to twelve years old.

	6 months	1	2	3	4	5	6	7	8	9	10	11	12
Heart rate	100-160	90-150	80-140				70-120						
Respiration	25-50		20-30				15-25						
Systolic BP	70-100		80-110				90-115						

Source: 'Clinical Practice Procedures: Assessment/Paediatric', Queensland Government 2016, https://www.ambulance.qld.gov.au/docs/clinical/cpp/CPP_Paediatric.pdf (accessed 10/08/17)

CPR considerations for children

As children's airways are narrower and more prone to obstruction than adults', it means that more care must be taken when administering CPR. Do not tilt the head too far backwards on a child, as this can block the airway further. Your rescue breaths should also be gentler.

Compressions should be shallower than those you would apply to adult patients. The depth of compression for a child (aged one to eight) should be only one and a half inches.

CPR considerations for babies

You should never shake a baby to check for consciousness, as babies are fragile, and this will cause them harm. Instead, gently stroke the baby, or tap the soles of the feet to check for a response.

To check for a pulse in a baby, you should use the inside of the upper arm, instead of the throat or wrist.

As with children, babies' heads should not be tilted far back to administer rescue breaths. The head should only be tilted back very slightly, to what is known as the 'sniffer's position', which will make it appear that the baby is sniffing the air.

Compressions on babies should be administered with only two fingers, and compressions should be at a depth of one to one-and-a-half inches.

Infant resilience

Children and babies are more likely to need CPR due to an airway blockage than due to a cardiac arrest. This gives them a much greater chance of survival when they receive CPR than an adult patient. You should always give CPR to a child or baby immediately when the need has been identified, as a quick response can be lifesaving.

Sources: 'Beyond the basics: Pediatric Assessment', EMS World, http://www.emsworld.com/article/10322897/beyond-basics-pediatric-assessment and 'What are the Differences Between Infant, Child, and Adult CPR?', CPR Certified,

https://www.cprcertified.com/blog/what-are-the-differences-between-infant-child-and-adult-cpr (accessed 10/08/17)

CPR on children and babies

If the casualty is a baby, you still need to perform chest compression and rescue breaths but in a slightly different manner in consideration of the size of their frame and risk of injury.

Babies

When performing CPR on a baby, they should be placed on their back as with adult casualties and it should be ensured that their airways are clear.

You should then:

- Make a seal over the baby's nose and mouth and give five initial rescue breaths
- Follow this by 30 chest compressions which are done by pressing down on the sternum with 2 fingers. The compressions should be at least one-third of the chest depth
- Perform two rescue breaths
- Repeat the process until help arrives.

If the baby begins breathing normally, you will need to place them in the recovery position. To do this cradle them in your arms with their head tilted at a downward angle to prevent choking.

Children

CPR on children also needs to begin with five initial rescue breaths, followed by the usual 30:2 ratio of compressions to rescue breaths. Chest compressions should be done using the palm of one hand, ensuring the fingers do not touch the ribs of the casualty.

Recognising own skills and limitations

When providing CPR to any individual, you should always act in accordance with the level of training you have received and any policies and procedures you are bound by; either legally or from your organisation. Any actions carried out should always be done with sincere intentions to help preserve life, in a non-reckless and caring manner.

Vomiting and regurgitation

Vomiting and regurgitation are not interchangeable terms and your reaction to their occurrence during CPR is important. Regurgitation is when food and fluid that has never reached the stomach travels back up the oesophagus. It can be difficult to spot as it generates no noise and there is no obvious muscle activity. Vomiting is when the stomach contents travels up the oesophagus and exits via the mouth. This is evident due to the expulsion of stomach contents, the recognisable sound, and muscle contractions. Even though vomiting and regurgitation are different when they happen during CPR they are dealt with

in the same way; the casualty should be placed on their side, their airways should be cleared manually, and CPR should be resumed.

Standard precautions

Standard precautions are those actions that should be undertaken before, during and after the administration of CPR to reduce the likelihood of infections being spread and any other harm being inflicted on yourself or others.

Infection control procedure was outlined in section 1.2 and whilst this is encompassed under standard precautions for the delivery of CPR, there are other considerations to make to ensure the health and wellbeing of all involved is maintained as best as possible.

Standard precautions include:

- Aseptic technique
- Personal hygiene practices especially washing and drying hands (e.g. before and after casualty contact)
- Use of personal protective equipment (PPE) or improvising if none is to hand, e.g., using a towel or plastic bag
- Techniques to limit contamination
- Surface cleaning and management of blood and body fluid spills
- Safe handling of sharps
- Safe disposal of sharps and other clinical waste
- Appropriate reprocessing and storage of reusable instruments.

Activity

1. What are the ARC guidelines regarding CPR?

2. What are the only reasons for ceasing the administration of CPR?

3. Write instructions on how to perform chest compressions.

4. Write instructions on how to perform rescue breaths.

5. How should you perform CPR on babies and children?

2.2 – Display respectful behaviour towards casualty

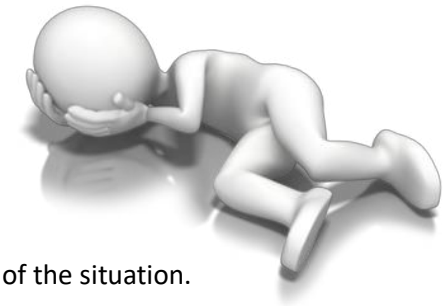
By the end of this chapter, the learner should be able to:

- Provide reassurance and minimise the risks associated with anxiety after incidents requiring first aid.
- Obtain implied or explicit consent where possible from the casualty
- Use first aid resources to provide comfort to a casualty

If the casualty is conscious after an incident, then they should be reassured as much as possible. It is likely that they will be in pain and be worried about their situation. However, there are several steps that you can take to ensure that they begin to feel safe, secure, and supported. You can make a real difference to the sense of pain and ensure that the casualty doesn't make the situation worse through their own anxiety if you provide necessary reassurance.

These steps should be taken:

- Being honest with the casualty but not disclosing medical information when it necessary
- Informing the casualty that first aid assistance is coming
- Telling the casualty if an ambulance has been called
- Remaining with the casualty
- Finding out the casualty's name and addressing them in a friendly manner
- Demonstrating confidence and remaining in control of the situation.



You shouldn't do the following:

- Inform the casualty of others who have been seriously injured or killed during the incident
- React in an overblown way to the situation
- Leave the casualty by themselves
- Move the casualty without good reason
- Show a lack of emotional control.

It may also be necessary to provide reassurance to family members and other workers who have been involved in the first aid process. Some people may feel guilty or worried that they didn't do enough to help the casualty. However, you should recognise and state the importance of any contributions that are made.

Obtaining consent

There is a legal obligation to obtain client consent. Clients have the right to decide on what care is appropriate for them as long as they have the ability to make that decision e.g., they are not under the influence of alcohol or drugs, or they have the cognitive capacity i.e. not suffering from a mental illness. This is even the case where death or serious injury may be the consequence of refusal.

Two types of consent:

- Implied – client follows instructions of the first aider or if the casualty is unconscious, mentally incapable of making decisions, intoxicated, or delusional
- Explicit consent – the client states agreement e.g., nods head or says 'yes'.

You need to get the consent of any people you provide first aid to before administering treatment (if possible), regardless of their age, health, mental status, or ability. If you act without obtaining consent, you may face legal action in the future.

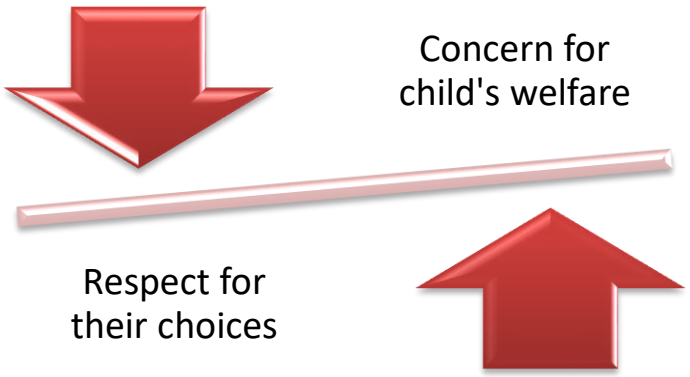
If the casualty is unconscious, mentally incapable of making decisions, intoxicated, or delusional then implied consent applies and there is no legal danger. However, if a parent or guardian is present for a child and is not unconscious mentally incapable of making decisions, intoxicated, or delusional, then consent must be obtained from them. It might also be necessary to obtain consent from caregivers of registered medical practitioners in childcare or educational environments.

Adults who are in a competent state are entitled to refuse treatment, even if it is lifesaving. Parents and guardians also have this legal right for children, but only in the 'best interests' of the casualty.

Children and consent

Adults are presumed to be capable of making their own decisions when it comes to care. Usually, children until the age of sixteen are not seen as capable of making their own decisions; they may refuse treatment that could save their life because it will be uncomfortable, or they are afraid.

This creates an ethical dilemma:



You should try to give children autonomy where possible as this can help gain a child's trust. This is mostly the case when there are options that are not essential, for example, a child refuses a plaster for a small wound. It is preferable that they have the plaster, but if it is going to cause distress, then you may need to respect their choice.

When children reach sixteen, they can sometimes make their own decisions regarding treatment if found to be capable. If not, responsibility is given to parents/guardians or local authority.

Can you treat a child without consent?

Yes, here are situations where treating a child without consent is acceptable:

- In an emergency/life threatening case
- When parents have neglected the child
- When parents have abandoned the child
- When parents cannot be found.

When a child between sixteen and eighteen is found to be capable and mature enough to make their own decisions and refuses treatment, they can sometimes be overridden. This is sometimes the case when they refuse life-saving treatment.

The Good Samaritan Law protects those who aid without any expectation of reimbursement or reward, and in good faith. As long as the person doesn't act recklessly and avoids further harm, they needn't fear legal repercussions from anyone – most Australian territories and states have this protection but check your location's laws for exact details.

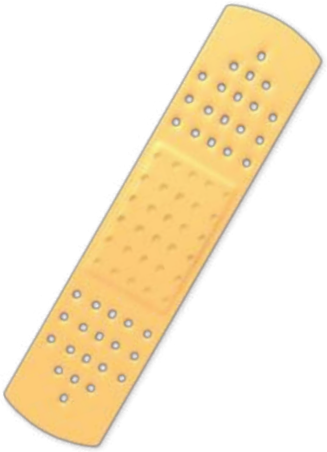
Making casualty comfortable

Using the available resources and equipment, the casualty should be made as comfortable as possible during their first aid treatment and until emergency services arrive.

Simple measures to do this include:

- Placing pillows under their head/injured limbs
- Keeping them warm using blankets and clothes
- Providing pain relief (using medication or bandages/slings)
- Using heat or cold packs for muscles or bumps.

The types of resources you may have available at the scene are:



- First aid kit:
  - bandages
  - slings
  - gauze
  - cleaning equipment
  - emergency blankets
- Adrenaline auto-injector
- AED device
- Bag-valve-mask
- Eye patch
- Placebo bronchodilator and spacer device
- Roller bandages
- Thermometer
- Hot and cold pack
- Triangular bandages
- Wound dressings
- 'Make do' equipment:
  - rolled up jumpers (pillow)
  - towels (blanket)
  - coats (blanket)
  - torn t-shirts (bandages).

Yourself as a resource

Comfort can not only refer to physical comfort, such as warmth, but also emotional comfort. As a first aid trained individual, you can easily provide this alongside medically orientated assistance.

The casualty may be understandably scared, upset, or anxious; so, providing emotional support can be incredibly comforting and help calm the casualty prior to an ambulance arriving.

Actions you can take to provide emotional comfort include:

- Staying next to the casualty until the emergency services arrive
- Giving verbal reassurance by using phrases such as 'I'm going to stay with you', 'Try not to worry' and 'Help is coming'
- Hold the casualties' hand if it is wanted and in line with their wishes
- Acting confidently to build the casualty's trust in your actions
- Talk to the casualty where possible, find out their name and use it in any communication with them.

2.3 – Operate an automated external defibrillator (AED) according to manufacturer's instructions

By the end of this chapter, the learner should be able to:

- Store and maintain an AED device
- Report any problems with equipment quickly and in line with organisational procedures
- Use an AED correctly according to device instructions.

Follow manufacturer's instructions

Manufacturers will have instructions on how pieces of equipment should be used and maintained. These will include any restrictions on the equipment and what the equipment should not be used for, or in what situations equipment should not be used. Ensure that you use all first aid equipment according to instructions provided by the manufacturer and don't try to use them for anything other than their intended use.

Designers and manufacturers of equipment have a duty to ensure that their products meet safety standards and give clear instructions for the use of their products/equipment. First aid workers then have a duty to use that equipment as intended. This means that you should not modify products or equipment in any way, even if you think it would work better with a modified design. If this is the case, you should seek professional help.

Maintaining equipment will help to prevent breaking down of equipment and injuries or health problems.

You should follow these rules:

- Equipment should be stored:
  - in an enclosed space
  - with loose cables tied up
  - at an accessible height for other carers
  - out of reach of someone unauthorised to use it
- Equipment should be regularly maintained:
  - try using a log to record when equipment was last checked and repaired
  - carry out a risk assessment on the equipment
  - pre-order regular maintenance check-ups from a professional company
  - have procedures in place for the maintenance of equipment

Reporting problems

Medical devices used in Australian health care are regulated by the Therapeutic Goods Administration (TGA). If for any reason the first aider finds that they cannot use the equipment as intended, they should contact a relevant professional e.g. supervisor. You may have organisational reporting procedures that you should follow. Please refer to these when reporting unsafe equipment. For example, you may be required to fill in an incident form (even if nobody has been harmed).

<u>What issues and problems?</u>

You may have issues or problems that arise from the operation of equipment including:

- Health issues
- Injuries
- Maintenance issues – breakdowns
- New equipment and lack of training with it.

The suspicion that equipment or materials in their current state could lead to these issues should be immediately reported.

Using an automated external defibrillator (AED)

Automated external defibrillators (AED) are an important electronic medical device and being able to use them correctly can have the potential to save lives. They can accurately recognise heart rhythms and establish whether they need shocking in order to return the rhythm to normal. Whilst anyone can use a defibrillator and they can be located within public places undertaking formal training in their use makes it more likely that you will be able to use the equipment with speed and efficiency.

CPR should always be continued up until an AED is completely ready to be used. Never stop administering CPR to go and fetch defibrillator equipment as this could be incredibly detrimental to the casualty.

Hazards

Just as you should do before administering CPR, it is necessary to check the surrounding areas for hazards to ensure the safety of the casualty and yourself. As AEDs provide electrical shocks to the recipient, you must make sure that there are no puddles or areas of surface water in the immediate vicinity.

You also need to remove any other electrical conductors – especially on the casualty.

This includes:

- Jewellery
- Underwired bras
- Piercings.

You should also check for signs of an implanted device or pacemaker so that you do not deliver a shock too close to these areas.

Reasons for defibrillation

Defibrillation will be required if the casualty is in sudden cardiac arrest (SCA) The most common form of this is ventricular fibrillation (VF). When the heart is in a state of ventricular fibrillation, it means that the heart is still receiving nerve impulses from the brain. However, these impulses are being sent so hectically that the heart cannot produce a proper beat. In other words, the heart cannot expel enough blood to keep the circulatory system flowing through the body. This is an emergency as after 4-6 minutes, brain cells that have been starved of oxygen begin to die.

Ventricular tachycardia (VT) is when the heart is beating at more than 100 beats per minute and there are more than 3 irregular beats within the same timeframe. It is the result of tangled electrical signals between the brain and the heart. This type of cardiac problem can also warrant use of an AED.

Following defibrillator instructions

Once the area and the casualty have been assessed for hazards, you should turn on the AED and follow the instructions it provides. Most commonly the AED will have a voice prompt that does this.

Instructions should be followed prior to attaching the device to the casualty and during any further actions taken. Once the defibrillator pads have been successfully placed on the body and the AED

electrodes have been attached to them, you should press the analysis button which will establish if the patient requires shocking. Ensure that during analysis and shocking if required that no other person is touching the casualty as the AED could pick of their heart rhythm as well as provide a shock to anyone touching the casualty.

Pad placement

To place defibrillator pads effectively, you will need to expose the chest and ensure that it is dry. If the casualty is hairy, then you may need to shave the chest area to ensure that the pads have full contact with the skin. Some AED devices have razors included for this purpose. All pads will have a diagram that indicates where they should be placed. Standard pads should be used on any individual over the age of 8. Anyone younger than this should be defibrillated using paediatric pads. Pads should always be placed at least 2.5cm away from any piercings that cannot be removed or implanted devices.

AEDs work by sending an electrical shock from one pad to the other to promote a regular heart rhythm, so it is important that you follow instructions and place them on the casualty properly and in the right location.

Resuming CPR

Between each shock given by an AED device to the casualty, CPR should be resumed and carried out in the way set out in section 2.1. After two minutes if there are still no signs of life then AED prompts should be followed with CPR then performed afterwards until medical assistance arrives.

Activity

1. Briefly describe how AEDs work.

2. What do you need to do in order to place defibrillator pads effectively?

3. Communicate details of the incident

3.1. Accurately convey details of the incident to emergency services

3.2. Report details of incident in line with appropriate workplace or site procedures

3.3. Maintain privacy and confidentiality of information in line with statutory or organisational policies

3.1 – Accurately convey details of the incident to emergency response services

By the end of this chapter, the learner should be able to:

- Accurately convey information to emergency personnel without adding superfluous information
- Provide information of the incident, the casualty and the medical attention given so that emergency response personnel can decide on the best course of action.

Conveying incident details

Once you involve the emergency services, it is vital that you provide an accurate verbal report of the incident – convey only the facts and do not offer speculative details. Emergency response professionals will use the information you give them to inform treatment. Accurate details give them the best picture of what is going on and what needs to happen next.

Examples of important information to provide to emergency response team:

- Time of the initial event
- Description of injury/illness
- Incident details
- First aid management
- Symptoms or effects of the injury that you have noticed
- Length of certain symptoms, for example, length of a seizure or period of unconsciousness
- Vital signs
- Any allergies or other circumstances that may affect treatment decisions
- The casualty's name, age, and other pertinent personal information
- For a child, information from their medical release form, as needed:

- Fluid intake/output, including fluid loss via:
  - blood
  - faeces
  - urine
  - vomit
- Administration of medication including:
  - type
  - purpose
  - dose
  - time
  - response.

3.2 – Report details of incident to workplace supervisor as appropriate

By the end of this chapter, the learner should be able to:

- Create accurate written reports of incidents
- Where applicable, complete incident report forms accurately
- Take part in thorough debriefings with staff after an incident
- Offer further support to staff following the incident where needed.

Written reports

As well as the initial verbal report a written report is also useful documentation. You should try and take notes wherever possible. This is because during the possibly stressful situation your memory may fail you when trying to recall it to emergency personnel. It is useful if your organisation has official CPR report forms to fill out immediately after the event. This allows you to have access to details, should they be required in the future.

Workplaces will also have incident forms that need to be filled out and kept on record – these must be completed in accordance with workplace policy and procedures, state/territory legislation, and privacy and confidentiality conditions. They will need to be passed on to the workplace supervisor and stored in the company records.

Organisations are legally required to report and keep records of serious accidents, emergencies, or health incidents that occur. Accurate records provide information to administrators and others that may need them to communicate with authorities or others about the event. Some incidents may require action from legal authorities. For example, if a child died as a result of a motor vehicle accident.

Confidentiality of information is still required in the case of an emergency or serious event. Certain details should only be shared with those who need to know, such as relatives of the casualty, administration, medical professionals, and authorities.

Depending on the nature of the incident different people may need to be alerted. If an incident occurs involving a child, there should be specific protocol for who needs to be alerted and how. This is often done through specific forms that are filled out by the staff witnessing the incident.

Verbal reports

Once you involve the emergency services, it is vital that you provide an accurate verbal report of the incident – convey only the facts and do not offer speculative details.

The types of details you need to include are:

- The time of the incident
- The events that unfolded
- The treatment provided
- The response to the treatment.

Only offer extra details or embellish on these facts if asked to. The quicker you can communicate the vital details to the emergency response team, the quicker the casualty can receive the appropriate treatment during the handover.

Incident report forms

Complete an incident report for all injuries. Keep the writing objective. Write the details exactly as they happened, without judgments, or assumptions.

The following questions should be answered in an incident report:

- Who?
  - Who is reporting the incident?
  - Who is affected by it?
- What?
  - What happened?
  - What action did you take?
  - What was the severity of the incident? (you may use an incident severity scale)
  - What was the outcome?
- When?
  - When did the incident take place?
- Where?
  - Where did the incident take place?
- How and why?
  - What were the elements that contributed to the incident?

A good incident report should be:

- Complete – it should cover all components in relevant detail
- Concise – it should include everything that is needed but exclude flowery descriptions, abbreviations can be used sparingly as they can also cause confusion and detract from the writing
- Specific – it should refer to exact times, dates, and other facts
- Objective – it should not give opinions or inferences

- Confidential – the identities of those who were involved and where it took place should not be revealed in the 'what happened' box as this must be sent to the Department of Health.

3.3 – Maintain privacy and confidentiality of information in line with statutory or organisational policies
By the end of this chapter, the learner should be able to:

- Uphold their duty of care surrounding personal records of staff and others
- Circulate information according to legislation and organisational policy and only when necessary
- Understand the privacy laws which their actions should be upheld by with regards to sensitive information
- Ensure records and information is held securely.

Privacy and confidentiality

Any personal information obtained during CPR procedures needs to be kept confidential and access to it only provided to the authorised personnel.

The types of information required include:

- Name and address of casualties
- Medical conditions of patients
- Types of treatment provided
- Results of any tests.

Personal information should be protected and only disclosed professionally. It is part of duty of care and applies to all casualties, regardless of their status. Therefore, it includes casualties with mental illnesses, physical or mental disabilities, drug/alcohol problems, and those who are difficult to deal with.

Organisation policy on confidentiality may relate to:

- Access to records
- Carriage and storage of records
- Collection and use of client's personal and health information
- Destruction of records
- Release of information.

Ways to ensure confidential information is kept safe include:

- Keeping it in locked filing cabinets
- Keeping it away from unauthorised people

- Keeping it in locked rooms
- Having it password protected on computers
- Refraining from naming clients in public discussion
- Discussing things in soundproof rooms.

Circulation of information

Clients will need to give permission (normally in writing) for their information to be released to others; if they are unable to do this through disability or death, advocates can grant permission.

Clients also have a right to view their records. If access is denied the client should be informed why and given details of when the decision can be reviewed.

There should be policies in place to deal with workers who breach confidentiality – these will depend on your specific industry. Breaching confidentiality can, however, give clients a right to open legal action against you and if the individual or organisation is found responsible, accreditation and awards could be removed from the culprit.

First aid staff must be versed in all confidentiality legislation, organisational policies, and which information should be treated as confidential. They need to know the policies and procedures for every possible situation, so regular training is essential.

Privacy laws

You need to be able to protect client data and respect the relationships you have. If you fail to do this, they will probably move to your competitors.

Privacy is governed by the Privacy Act 1988 (Privacy Act), which regulates the handling of personal information.

As of March 2014, the following privacy legislation amendments came into effect:

- Privacy Amendment (Enhancing Privacy Protection) Act 2012
- Privacy Regulation 2013
- Credit Reporting Privacy Code.

You can read more about the privacy law reform at: www.oaic.gov.au/privacy/privacy-act/privacy-law-reform

There are 13 Australian Privacy Principles that apply to the handling of personal information, contained in Schedule 1 of the Privacy Act:

1. Open and transparent management of personal information
2. Anonymity and pseudonymity

3. Collection of solicited personal information
4. Dealing with unsolicited personal information
5. Notification of the collection of personal information
6. Use or disclosure of personal information
7. Direct marketing
8. Cross-border disclosure of personal information
9. Adoption, use or disclosure of government related identifiers
10. Quality of personal information
11. Security of personal information
12. Access to personal information
13. Correction of personal information.

Full information on the Privacy Act and its terms can be found at www.oaic.gov.au/privacy/privacy-act/the-privacy-act.

4. Review the incident

4.1. 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

Debriefing

Although not only related to the relaying of information to a supervisor taking part in debriefings is important following an incident that required CPR and the use of an AED. Some first aid situations may evoke strong emotions among those involved, especially if they are traumatic events. They can, in turn, affect the health, performance, and well-being of people in the workplace. There are no set guidelines for what is traumatic – what one person can brush off with ease, another person may find extremely distressing.

In a few cases, the symptoms of distress can develop into chronic illness, which may need long-term treatment. Be aware that this can be the case for any traumatic incident. The symptoms won't necessarily become apparent in the immediate aftermath of the event – it can take months or years for them to appear, as well as manifesting immediately or days after it.

Debriefing is important as it can help people to process and come to terms with traumatic events. Debriefing is not counselling but a 'structured voluntary discussion aimed at putting an abnormal event into perspective'. Ideally, debriefing should be conducted near to the site of the event and within 3-7 days of it happening.

'Trained debriefers help the workers to explore and understand a range of issues, including:

- The sequence of events
- The causes and consequences
- Each person's experience
- Any memories triggered by the incident
- Normal psychological reactions to critical incidents
- Methods to manage emotional responses resulting from a critical incident'.

Source: https://www.betterhealth.vic.gov.au/health/healthyliving/workplace-safety-coping-with-a-critical-incident

Following debriefing, it may be established that there are some individuals who need further support in order to address their feelings surrounding the incident. This may be something relatively simple such as moving from working in a lone office to a group space or may be something which is more in depth such as counselling or psychological first aid.

Activity

1. What questions should be answered within an incident report?

2. What constitutes a good incident report?

3. Why is debriefing staff following an incident essential?

2.2 Contribute to a review of the first aid response as required

Go back over the situation. Were there things that you could have done better? Was there anything you couldn't do because you had forgotten or never learned something? Be honest with yourself.

If you think you could have done better, you can gain objective feedback from an outsider who may place your efforts in proper perspective. Always be on the lookout to improve your skills.

Evaluating your performance may be the only way you can identify how to provide better first aid before it's too late. Your workplace can also learn from your experience and develop methods to improve emergency response techniques. Your workplace may need to review and amend workplace policies and procedures, based on your feedback about the incident.

Your employer may provide you with relevant training courses to assist you with professional development and update skills critical in becoming a better first aider.

References

These suggested references are for further reading and do not necessarily represent the contents of this unit.

Websites

The 'First Aid in the Workplace' Code of Practice:
http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/first-aid-in-the-workplace

Australian Venom Research Unit:
www.avru.org

Australian Resuscitation Council:
www.resus.org.au

Wong Baker pain scale:
http://www.health.gov.au/internet/publications/publishing.nsf/Content/triageqrg~triageqrg-pain~triageqrg-wong

FLACC pain scale:
http://www.health.gov.au/internet/publications/publishing.nsf/Content/triageqrg~triageqrg-pain

Emergency plans and procedures:
http://www.safeworkaustralia.gov.au/sites/swa/about/publications/Documents/657/Emergency_plans_fact_sheet.pdf

Debriefing:
https://www.betterhealth.vic.gov.au/health/healthyliving/workplace-safety-coping-with-a-critical-incident

Privacy law:
www.oaic.gov.au/privacy/privacy-act/privacy-law-reform

Privacy Act:
www.oaic.gov.au/privacy/privacy-act/the-privacy-act

First aid:
http://www.nhs.uk/conditions/Accidents-and-first-aid/Pages/Introduction.aspx

Reassure the casualty:
https://sielearning.tafensw.edu.au/MCS/FirstAid_Ultimo/firstaid/lo/5253/5253_01.htm

Record keeping and documentation for first aiders:
http://www.firstaidforfree.com/record-keeping-and-documentation-for-first-aiders/

First aid injury report form:
http://det.wa.edu.au/policies/detcms/policy-planning-and-accountability/policies-framework/forms/first-aid-injury-report-form.en

Report an incident or injury:
http://www.safework.nsw.gov.au/health-and-safety/Report-an-incident-or-injury

Guide to incident notification:
https://www.worksafe.vic.gov.au/__data/assets/pdf_file/0016/11266/IncidentNotification.pdf

Psychological first aid for children and adolescents:
http://tgn.anu.edu.au/wp-content/uploads/2014/10/Psychological-first-aid-for-children-and-adolescents_0.pdf
Helping your child cope after an accident:
https://tgn.anu.edu.au/wp-content/uploads/2014/10/Helping-your-child-cope-after-an-accident.pdf
Workplace safety - coping with a critical incident:
https://www.betterhealth.vic.gov.au/health/healthyliving/workplace-safety-coping-with-a-critical-incident
Your response to the accident/incident:
https://sielearning.tafensw.edu.au/MCS/FirstAid_Ultimo/firstaid/lo/5255/5255_04.htm

'How are children different' by The Royal Children's Hospital, Melbourne:
http://www.rch.org.au/paed_trauma/manual/11_How_are_children_different/ (accessed 10/08/17).
'Beyond the basics: Pediatric Assessment', EMS World:
http://www.emsworld.com/article/10322897/beyond-basics-pediatric-assessment (accessed 10/08/17).
'What are the Differences Between Infant, Child, and Adult CPR?', CPR Certified:
https://www.cprcertified.com/blog/what-are-the-differences-between-infant-child-and-adult-cpr (accessed 10/08/17)
ANZCOR Guidelines:
https://resus.org.au/guidelines/ (accessed 10/08/17)

Publications
'Clinical Practice Procedures: Assessment/Paediatric', Queensland Government 2016:
https://www.ambulance.qld.gov.au/docs/clinical/cpp/CPP_Paediatric.pdf (accessed 10/08/17)

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