



HLTAID003 PROVIDE FIRST AID



PRE-COURSE WORKBOOK



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HLTAID003 PROVIDE FIRST AID

Course Content:

- Legislation
- Infection Control
- Assess the situation
- Assess casualty's signs of life
- Follow the chain of survival
- Perform CPR
- Understand the use of an AED (automated external defibrillator)
- Care of unconscious casualties
- Reporting incident details
- Stress management
- Recognise and manage: asthma, choking, heart attack, stroke, bleeding, shock, Anaphylaxis, burns, eye & ear injuries, temperature related conditions, poisons, bites & stings, musculoskeletal injuries, altered conscious states, bandaging techniques

Course duration: 16 hours or 6 hours flexible learning WITH COMPLETION OF THIS ACTIVITY

Certificate: A Statement of Attainment will be issued upon successful completion of the course HLTAID003

HLTAID003 - ASSESSMENT PROCEDURE

Assessment is consistent with the requirements of the Australian Quality Training Framework (AQTF) Standards for Registered Training Organisations.

The purpose of the assessment is to determine whether or not competence has been achieved in the knowledge and skills as stipulated in the elements of competency.

The assessment process may involve various practical activities, verbal questioning, role-play / scenario work & a written test to determine the participant's competency in the application of the knowledge and skills as outlined in the course "elements of competency"

During **the various methods of assessment** - practical / scenario / role play / written test - the assessor will observe the participant:

- Approach the scene and assess for dangers (including infection control)
- Take steps to control the scene and dangers
- Approach the casualty in a supportive and culturally sensitive manner
- Determine the casualty's condition and need for further care
- Communicate to a casualty in a manner suitable to their condition
- Use safe manual handling
- Apply first aid techniques as needed
- 000 / 112 - Convey incident details to emergency services
- seek bystander support
- assess casualty's signs of life
- protection of an unconscious casualty's airway / lateral recovery placement
- determine need for CPR & use of an AED
- bandaging wounds & bleeds
- recognise anaphylaxis and correctly use an adrenaline auto-injector
- recognise signs of asthma and follow asthma support guidelines
- use the pressure immobilization technique for deadly bites and stings
- apply various slings for musculoskeletal management
- recognise and manage various conditions that result in an altered conscious state

When performing CPR, the candidate will be observed for 2 minutes (5 Cycles) and the assessor will examine:

- jaw support
- head tilt
- nose pinch or cheek seal
- breathing
- compression depth and pace
- 30 compressions and 2 breaths being delivered
- variations of the skills above to suit Adult and Infant

The written assessment will draw on the knowledge and skills covered in the course and include:

- Provide reports where applicable
- Understanding legal responsibilities of first aider
- Evaluation of performance
- Debriefing and seeking of support after an incident
- Recognising signs and symptoms of a heart attack, stroke, choking, asthma, bleeding, shock, poisoning, eye & ear injuries, musculoskeletal injuries, altered conscious states and apply the appropriate management techniques
- Hazard minimization
- Use of an AED

Assessment will be conducted and evidence gathered using a range of techniques to ensure assessments are valid, reliable, flexible and fair.

An integrated approach to assessment may be used in some areas.

Assessment will be equitable to all groups of learners. If a participant has any language literacy or numeracy needs or any mobility concerns, the assessor can modify methods of determining competence to support the participant during assessment. (Please inform trainer of any needs)

Participants who do not demonstrate competency on initial assessment will be able to repeat the assessment after further instruction.

GENERAL PRINCIPLES OF FIRST AID

DUTY OF CARE

Duty of Care in First Aid is the legal responsibility to look after a person when they are injured or ill.

A workplace first aider has a duty of care to look after people in their workplace in the event they are sick or injured.

A workplace First Aider or other person or bystander does not have a duty of care in a public place. It is a choice to help in this situation but once a person has committed to help, a duty of care begins. This duty of care ends only when one of the following occurs.

- 1) The casualty recovers and no longer needs help
- 2) A Paramedic or other medical professional takes over from you.
- 3) It becomes dangerous for you to continue
- 4) You have become Physically incapable of continuing care due to fatigue

Australian states and most Territories abide by this principle but some territories in Australia may place a duty on First Aiders in a public place, so it is advisable to check with your authority. The Northern Territory has laws in place that require those who are trained and able to help in First aid to do so if safe.

CONSENT

A first aider requires the consent of a casualty to provide first aid to them. If a casualty refuses help but is seriously unwell or injured, it is best to call 000 and get assistance while continuing to reassure and monitor the casualty until help arrives.

Consent is implied where a casualty is conscious but unable to communicate or when they are unconscious and First aid assistance is provided as needed.

LITIGATION

A first aider is protected as a "Good Samaritan" in most states and territories - the wrongs act 1958 (Victoria), the civil liability Act 2002 (NSW) the wrongs act 1936 (SA) of legislation are examples of this. This protection is valid if:

1. Only providing care that they are trained to deliver
2. Working to the best of their ability and with reasonable care
3. Acting in good faith and in the best interests of the casualty

It is important that a First Aider does not attempt to provide care that is beyond their level of training.

INCIDENT REPORTS / REGISTER OF INJURIES

A designated First Aider who has provided First Aid care in the workplace must complete an incident report as soon as possible after the event. A register of injuries may need to be completed. Each workplace will have an incident report form and maintain a register of injuries. These reports must be kept confidential.

First Aid carried out in public areas don't require the completion of reports, however Police may need a statement from the first Aider or witness to certain events.

1. Who has duty of care to help casualties in the workplace?

- a) all people b) workplace first aiders c) no-one

2. Should we gain consent where possible before commencing first aid?

- a) Yes b) No

3. Is it likely we would be sued if we did everything we were trained to do to the best of our ability?

- a) Yes b) No

4. Would we need to fill out an incident report if we had provided first aid in the workplace?

- a) Yes b) No

HYGIENE & INFECTION CONTROL

To minimize cross infection, it is good practice for first aiders to have barriers such as gloves and resuscitation masks within easy access. These help to avoid the spread of bodily fluids between casualty and the first aider. Bodily fluids that could be present include: blood, urine, faeces, saliva & vomit. In some industries, eye protection and face masks may also be used to prevent splash-back and maintaining vaccinations against certain conditions like Hepatitis B may be advisable. After providing first Aid, especially where there has been bodily fluid present, it is a good idea to clean and wash hands, arms and any other areas where contact may have occurred.

When dealing with wounds on a casualty, the gloves a First Aider wears not only protects them, but also provides clean contact with the wound which minimizes further infection. Cleaning wounds well and using sterile dressings to cover them where possible, also reduces the risk of further infection.

5. What should a first aider have within easy access to avoid infection hazards?

- a) Mobile phone b) change of shoes c) gloves, mask and other protective gear if needed

6. What else can a first Aider do to further protect themselves from risk of exposure to viruses or bacteria?

- a) Maintain relevant vaccinations b) wash exposed parts well after an incident c) both a & b

CALLING AN AMBULANCE

An ambulance can be called on 000 from either a landline or a mobile phone. From a mobile phone, the number 112 can also be used. 112 is a universal number that can be used in many countries overseas. The number 000/112 will link to any network within range to provide access to emergency services from a mobile. Where there are no network towers within range you will not get access. If you are travelling in a remote area, it will be of benefit to take a satellite phone or Personal locator beacon



personal locator beacon

When calling 000, you will be asked which service you require - Police Fire or Ambulance and then which state you are calling from. The information needed by emergency services is:

- Nature of the incident
- Location of incident (nearest intersection /landmarks etc)
- Number of casualties
- Casualty's condition (breathing? conscious?)

LISTEN TO ALL QUESTIONS AND FOLLOW INSTRUCTIONS. DO NOT HANG UP UNTIL INSTRUCTED TO DO SO

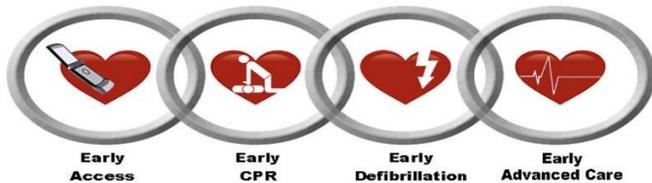
HANDOVER TO PARAMEDICS

In an incident where paramedics attend, a First Aider may need to provide details as part of a handover. Details such as:

1. Incident History and time of any incident or event
2. Any pre-existing medical conditions if you are aware of them
3. Any signs, symptoms &/or injuries you have observed
4. Any drugs or medications you may believe the casualty has taken
5. The first aid care you provided

CHAIN OF SURVIVAL

The chain of survival highlights the key steps in ensuring the best outcome in a cardiac arrest emergency.



Early Access – Call 000 / 112 – the quicker the call is made, the quick the Ambulance arrives

Early CPR – to buy time by sustaining life until the Ambulance arrives

Early Defibrillation – within 10 minutes giving the best chance of restoring the heart to normal rhythm

ALS – Advanced life support provided by paramedics - to stabilize the casualty for safe transport to hospital

ASSESSING THE CASUALTY

We try to determine what is wrong with a casualty by making an assessment which includes considering the: HISTORY SYMPTOMS SIGNS

HISTORY – either

- a) the incident history (what happened e.g.: fallen from a ladder)
- b) any pre-existing medical history e.g.: diabetes, epilepsy (check casualty for medic alert or SOS necklaces and bracelets which may have medical condition information)

SYMPTOMS – what the casualty feels e.g.: pain, shortness of breath, numbness, cold etc

SIGNS – things that we can observe about the casualty e.g.

see - limb deformity, bleeding etc

feel - temperature, pulse, moisture etc

hear - noisy breathing, crepitus (grating, crackling or popping sounds and sensations experienced under the skin and joints)

smell - breath (e.g. acetone like smell on the breath in diabetes, gases (e.g.: gas, CO₂, fumes) that may have led to the casualty's collapse

7. What is the emergency services number in Australia?

- a) 911 b) 999 c) 000

8. The chain of survival highlights the key steps:

- a) in a cardiac arrest emergency b) in performing CPR c) in assessing a casualty

9. History can involve:

- a) Any pre-existing medical history b) The incident history c) either A or B

10. Symptoms are:

- a) What the casualty feels b) What the casualty hears

11. Signs are things the first aider can:

- a) See and feel b) hear and smell c) both A and B

BASIC LIFE SUPPORT

Basic Life support involves the protection of unconscious people by maintaining an open airway and/or the preservation of life through CPR & defibrillation for those not breathing (or not breathing effectively)

The basic life support flowchart offers us a systematic way of dealing with a medical emergency that allows for the best and safest approach to manage a collapsed casualty.

The flow chart uses the letters **D.R.S.A.B.C.D.** We follow this in a medical emergency. This can be remembered by imagining a team of Doctors known as Drs ABCD

DANGER – Assess the situation and control any dangers

RESPONSE – check casualty for consciousness. “Can you hear me, open your eyes, what’s your name, squeeze my hands and let go”

If conscious (responsive), begin further assessment, management and reassurance

If unconscious (not responsive):

SEND FOR HELP - call for ambulance and proceed to following step

AIRWAY – clear and open the airway by removing any foreign objects then tilting the head back using jaw thrust



BREATHING – look, listen and feel for breathing

If breathing turn the casualty into recovery position as in figure 1 below

If not breathing:

COMPRESSIONS – provide 30 compressions - followed by 2 breaths & then continue 30:2.

If unwilling to provide breaths, continue compressions only

DEFIBRILLATION – attach an AED (automated external defibrillator) as soon as one is available

IF the casualty is unconscious and BREATHING, we need to place them into the recovery position.



All unconscious casualties who are breathing and lying on their back must be placed into the **recovery position** (on to their side) to protect and maintain a clear and open airway. The airway of an unconscious person may be vulnerable to blockage from regurgitation, foreign materials or from their own tongue. An unconscious person loses the gag, cough and swallow reflex so they cannot clear their own airway and the risk of regurgitation is very high.

If the person is unconscious and not breathing, we must commence CPR

When performing CPR, we provide **30 compressions to 2 breaths for all casualties who are unresponsive and not breathing** regardless of age. For adults and children over 1. Head tilt is provided. Infants (under 1 year of age) the head is maintained in a neutral position. **If you cannot or are unable to provide the 2 breaths, then continue compression only CPR.** CPR is provided to a casualty to buy time and sustain their lives by circulating oxygenated blood to vital organs. An AED should be attached as soon as possible when providing CPR. The AED assesses the heart's rhythm and will determine whether or not a shock is needed. An AED will analyse the heart every 2 minutes. Keep providing CPR and following the prompts of the AED until paramedics arrive.

CPR is performed by pushing on the centre of the chest and on the lower part of the sternum. Compressions should be approximately 1/3 the depth of the chest and provided at 100 to 120 compressions a minute. This is true for all casualties regardless of age.



AN AED ATTEMPTS TO RESTORE A NORMAL RHYTHM TO A HEART WHEN IT HAS FAILED - THERE IS A GREATER CHANCE OF DEFIBRILLATION BEING SUCCESSFUL IF IT IS USED WITHIN 10 MINUTES OF THE CARDIAC ARREST. NEVER BE AFRAID TO USE THE AED. IT WILL NOT DELIVER A SHOCK UNLESS IT IS NEEDED.

12. If there was no danger and you found no response from the casualty, what would you do next?

- a) Leave the casualty b) Send for help c) Take their wallet

13. Would you commence CPR on a breathing or non-breathing casualty?

- a) Breathing b) Non-Breathing

14. Would you attach an AED to a non-breathing or breathing casualty?

- a) Breathing b) Non-Breathing

15. What is the ratio of compressions to breaths for all casualties?

- a) 60:4 b) 30:2 c) 15:1

16. Is CPR intended to

- a) bring people back to life? b) sustain life?

RESPIRATORY DIFFICULTIES

Choking



You should always assess the seriousness of a choking episode before taking action. If the casualty has an effective cough, then you should not provide any physical interference. We should encourage the person to cough it out and continue to observe them. If there is no improvement or the casualty deteriorates then an ambulance should be called immediately.

If there is not an effective cough or the casualty is unable to breathe or speak, then up to 5 back blows should immediately be delivered. If this is not effective, then 5 chest thrusts should be given to the casualty. If this does not clear the obstruction, then continue to alternate between back blows and chest thrusts until recovery. If this has failed and the casualty becomes unconscious, then basic life support should be provided.



Children can be placed over your lap

Asthma



Asthma is a condition where the bronchioles of the lungs can become narrowed. This can be the result of spasm of the outer wall of the bronchiole, swelling of the inside or extra mucus being produced. It can be recognised by coughing and/or wheezing and/or rattling noises and respiratory distress, however signs and symptoms can vary from person to person. Asthma can be triggered by a number of things including pollens, grasses, dust, dust mites, air pollution, animal fur, some medications and foods, changes in temperature and exercise among many triggers.

A good way to recognize the severity of an asthma attack is to ask the casualty a question that would need a sentence to respond.

Long Sentence – Mild Asthma episode

Short Sentence between breaths – Moderate Asthma Episode

Few words between breaths and great difficulty speaking – Severe Asthma Episode – Call 000

In order to support a person having an asthma attack, sit them upright with arms outstretched encouraging slow breathing if possible. Support them to take 4 puffs of their blue asthma reliever medication preferably through a spacer device. One spray of the puffer then 4 breaths to draw the medication from the spacer. This repeated 4 times. Wait 4 minutes and then repeat another 4 puffs through a spacer. If this second lot of 4 puffs does not bring about any relief, then an ambulance should be called. 4 Puffs every 4 minutes should be continued until the ambulance arrives or the casualty recovers. Side effects may include body shakes, rapid heart rate, headache and agitation but these are not dangerous.

17. If a person has an effective cough we should deliver back blows.

- a) TRUE b) FALSE

18. For a serious airway obstruction, we would deliver how many back blows?

- a) 5 b) 6 c) 7

19. What is the colour of the Asthma reliever medication?

- a) Orange b) Pink c) Blue

20. How many puffs of the reliever should we give an asthma sufferer every 4 minutes?

- a) 6 b) 4 c) 2

Anaphylaxis



Anaphylaxis is a serious allergic reaction to a common substance or allergen. Common allergens include foods such as nuts, shellfish, dairy, eggs etc, chemicals, latex, bites and stings, medicines, exercise. A mild reaction includes facial, eye and lip swelling, hives and welts, abdominal pain and vomiting. A serious reaction is indicated by any respiratory difficulty such as persistent coughing, tightness in the throat, tongue swelling and also signs of collapse or pale and floppy in children. (In sting allergies feeling nauseous or vomiting is a sign of a severe reaction.)

Upon any sign of a severe reaction, an adrenaline auto-injector (EpiPen®) should be administered immediately and an ambulance called. The auto injector should be injected into the outer thigh. The auto injector has a single pre-loaded dose of adrenaline.



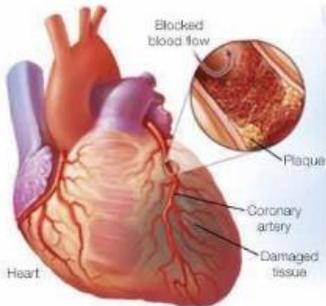
21. You should inject a casualty with their adrenaline auto-injector at signs of:

- a) A mild reaction or
- b) A serious reaction

22. Into what part of the body do we inject the adrenaline auto injector?

- a) Arm
- b) Outer Thigh
- c) Stomach

HEART ATTACK



A heart attack may be recognised by one or a number of the following: pain or discomfort in the middle of the chest, possibly radiating through the neck and jaw, shoulders or arms and sometimes through the back. The casualty may have difficulty breathing, experience nausea and may appear pale/grey and sweaty. An ambulance must be called immediately if you suspect a heart attack. The casualty should be rested in a semi-reclined position with clothing loosened for comfort, reassured and constantly monitored.

Aspirin may be given providing the person is not allergic to Aspirin and be mindful if they have an ulcer. It is also important to ask if they have already taken Aspirin or are on blood thinners. 000 operators can support you in this decision making. The aspirin given can be the normal 300mg dose but preferably chewable or mouth dissolvable.

23. Signs and symptoms of a heart attack are:

- a) pain or discomfort in the middle of the chest, possibly radiating through the neck and jaw, shoulders, or arms and sometimes through the back
- b) Difficulty breathing, experience nausea and may appear pale/grey and sweaty
- c) Both A & B

24. You should manage a casualty suffering a heart attack by:

- a) Seek urgent medical attention and rest them in a semi-reclined position with clothing loosened for comfort.
- b) Giving them some alcohol to relax them
- c) Making them go for a walk to keep the heart pumping.

STROKE

A stroke affects blood supply to the brain and can be caused by a blockage of a blood vessel or by a rupture of a blood vessel. A Stroke could be recognised by one or more of the following: numbness, paralysis, tingling or weakness down one side of the body, facial weakness or drooping on one side, severe headache, nausea and speech difficulties. A casualty suffering a stroke needs immediate and urgent medical attention. The casualty is best rested in a semi-reclined position with constant re-assurance and monitoring whilst awaiting the ambulance.



25. Some signs and symptoms of a stroke may include:

- a) Numbness, speech difficulties, paralysis or facial weakness on one side of the body
- b) Severe headache, nausea, tingling
- c) Both A and B

26. How would you manage someone suffering a stroke?

- a) Put the casualty to bed and let them rest
- b) Seek urgent medical attention and rest patient in a semi-reclined position whilst waiting for ambulance
- c) Give the casualty Panadol
- d)

BLEEDING

There are 2 main forms of bleeding: Internal & External.

Internal bleeds may be caused by blunt trauma or impact to the body or by a medical problem. Internal bleeds may be recognised by seeing the coughing of blood, vomiting blood, blood in the urine or blood in the faeces. You might also see swelling and bruising in the abdominal area and the casualty may show signs of increasing levels of shock. The casualty will need to be rested, reassured, covered and an ambulance called immediately.

External bleeds can range from small to life threatening. Bleeding from an artery can be recognised by spurting bright red blood. Bleeding from a vein can be recognised by flowing dark red blood, and bleeding from capillaries will be recognised by oozing red blood. External Bleeds should be managed by applying direct pressure to the wound and resting the body part affected. The casualty should be placed into a comfortable resting position (preferably lying down) and reassured. Minor bleeds are simply cleaned well and covered with a sterile dressing, however major bleeds should be controlled immediately without any concern for cleaning.



Embedded objects should not be removed as this can cause more harm. Indirect pressure should be used by either using a donut bandage or building up dressings around the object. This will support the object and stop it moving but also help minimize more blood loss both internally and externally.

Amputation injuries may cause serious bleeds and distress. The bleed should be managed first following bleed control principles above. Once the bleed is managed, place the amputated body part into an airtight plastic bag and float it in a container filled with ice and water (if possible), ensuring no water or ice comes into direct contact with the body part. If no ice or water is available, try to keep the body part protected by placing it into some sort of container and keep it cool by surrounding the container with other items such as instant ice packs or frozen vegetables.



Nose Bleeds

Management

- Pressure should be applied using the thumb and index finger to the soft part of the nose just below the bone
- The casualty should lean with the head forward & encouraged to spit out any blood
- The casualty should remain seated and pressure applied for at least 10 minutes.
- On a hot day or after exercise, it might be necessary to maintain pressure for at least 20 minutes
- If bleeding continues for more than 20 minutes seek medical assistance

Mouth & Teeth Injuries

Management

- Ensure casualties airway remains clear of blood
- If the lip is injured, place a clean dressing on the bleed and squeeze between fingers
- If a tongue injury and the person is able to do so, apply pressure with a damp dressing
- If a tooth has been knocked out, ask the casualty if able to suck it clean and push it back into the tooth socket and press aluminium foil over the tooth and surrounding teeth to act as a splint and get the casualty to bite down
- If not able to replace tooth in its socket, ask the casualty to place the tooth between bottom teeth and the lip or under the tongue to keep it moist with saliva

27. Internal bleeds may be recognised by:

- a) Swelling and bruising in abdominal area
- b) Coughing up blood, vomiting blood, blood in urine or faeces
- c) Both A and B

28. How do we manage an external bleed?

- a) Cover the wound without cleaning
- b) No need for action; wounds are fine to be left alone
- c) Apply direct pressure to the wound and rest body part affected

29. You must manage a bleed with an embedded object by:

- a) Removing the object and bandaging the wounded area
- b) Use indirect pressure by using a donut bandage or building up dressings around the object
- c) No action necessary

30. How do we manage an amputated body part?

- a) Put amputated body part in your handbag
- b) Manage bleed and place amputated body part into an airtight plastic bag and float it in a container filled with ice water

SHOCK

Shock is a loss of effective circulating blood volume and can be caused by excessive bleeding, dehydration, Physical and emotional pain. We should expect to treat shock to some degree whenever we perform first aid. Shock is recognised by the following signs and symptoms:

- Cold, pale and clammy skin
- Rapid weak pulse
- Rapid shallow breathing
- Thirst
- Confusion / agitation
- Weakness
- Feeling cold



The casualty should be laid down and covered with a blanket or clothing to maintain body temperature and reassured. No food or drink should be given to a victim of shock as this may cause the casualty to vomit or more importantly delay and/or complicate surgery.

FAINTING

Fainting can occur when blood pools in the legs causing a drop in blood supply to the brain. This results in a loss of consciousness. It can be caused by a number of things including: standing still for long periods of time, pain & distress.

Recognition:

- Collapse
- Pale
- Cool & clammy skin
- Nausea

Management: Lay the person down and raise their legs. A person usually recovers from fainting fairly quickly once they have been laid down with the legs raised. If recovery does not occur, follow the basic life support flowchart - DRABC

31. How might we recognise shock?

- a) Feeling cold, weak, and agitated
- b) Rapid weak pulse, cold, pale, and clammy skin
- c) Both A and B

32. How would we manage the casualty suffering shock?

- a) Put them to bed
- b) Give casualty something to eat
- c) Lay casualty down and cover them with a blanket

33. How do we position a casualty who has fainted?

- a) Sit the casualty up and raise their knees
- b) Lay the casualty down and raise their legs
- c) Lay them on their side

EYE AND EAR INJURIES

Eye injuries can cause great distress. The safest way to clear foreign particles or chemicals in the eye is to irrigate with water or saline. It is important to turn the head to one side and have the injured eye down to avoid any cross contamination of the good eye. If an object is deeply embedded in the eye, do not try to irrigate the eye. If the casualty can close the eye, then very gently apply a pad to both eyes and seek immediate medical aid. If the object protrudes from the eye, then apply a donut bandage to the injured eye and also cover the other eye to avoid any movement. Seek immediate medical aid.



Ear injuries can cause severe pain and loss of balance. If bleeding is present, do not plug the ear, but allow blood to drain into a lightly applied dressing and seek medical aid. Ear injuries often occur as a result of impact to the ear or in some cases penetrative injury, infection or sudden changes in air pressure.

34. How would you clear foreign particles or chemicals from an eye?

- a) Irrigate the eye with water or saline
- b) Clean the eye with a cotton bud

35. How would you manage an ear injury?

- a) No action needed
- b) If bleeding present, allow blood to drain into a lightly applied dressing and seek medical aid

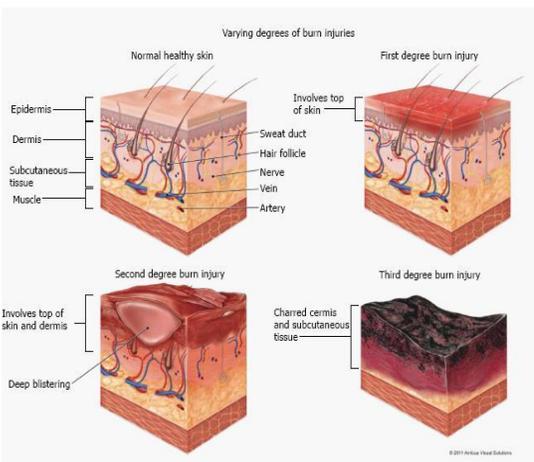
BURNS

Burns can be caused by open flames, boiling water, hot surfaces, chemicals, electricity or even very cold substances like Liquid nitrogen or LPG. It is important to make sure all dangers are controlled before attempting to help a casualty. All burns should be **cooled immediately under running cold water for at least 20 minutes**. After the burn has been cooled, a sterile non-stick dressing should be applied. Chemical burns should be cooled for between 30 to 60 minutes. If possible, elevate the burnt area to reduce swelling & remove any jewellery. Do not remove clothing that has stuck to the burn but cut the clothing off around the burn. Ensure the casualty does not become too cold – if they begin to shiver uncontrollably, stop the cooling and cover the casualty.

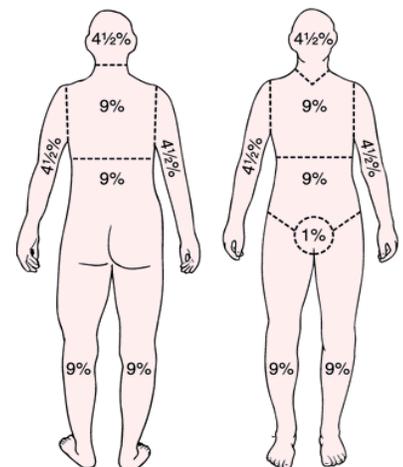


In simple terms the management of burns can be termed C-C-C:

i.e. **Cool** the burn down to control damage / **Cover** it to control infection / **Call** the doctor or Ambulance when necessary.



Burns are categorized by depth and area. All deep burns should be assessed and treated by medical professionals and any burn greater than 9%-10% should be considered a very serious burn requiring hospital treatment. Remember that cooling burns down is the priority regardless of cause, depth or area of damage.



36. What should we be sure to do before approaching a burn situation?

- a) Make sure all dangers are controlled
- b) Sit down and have a drink
- c) Strip down to minimal clothing

37. To treat a burn we should:

- a) Keep warm, cover the burn
- b) Keep cool, do not cover burn
- c) Cool the burn down, Cover the burn, call for medical assistance if needed

ENVIRONMENTAL CONDITIONS

Hypothermia



Hypothermia can occur when a person is cold & wet for an extended period of time. With mild hypothermia the person will be pale and cold, will appear slow and may start to shiver uncontrollably. The casualty may show signs of confusion but will still be able to communicate. If the casualty continues to deteriorate, they will stop shivering, act irrationally and will soon collapse. This is severe Hypothermia.

To treat hypothermia, bring the casualty indoors or move to some form of protective environment, remove all wet clothing and wrap them in dry clothes or blankets. It is important not to warm the casualty too quickly as this may cause them to worsen. Avoid hot baths, showers or heaters. Gentle and slow warming is the key. Hot, sweet drinks may be given if the casualty is capable of drinking them.

Hyperthermia

Hyperthermia can occur when a person is exercising or active in the heat for extended periods of time. Hyperthermia can progress from mild - heat exhaustion, to the more life-threatening condition of heat stroke. Heat exhaustion can be recognised by hot, pale and sweaty skin & the casualty may feel dizzy, weak and nauseous. The person will still be able to communicate reasonably.

To treat heat exhaustion, take the casualty out of the heat, remove excess clothing and cool them down by sponging and fanning them gently. Help to re-hydrate the casualty by giving them small sips of cool water.

If the casualty continues to dehydrate then they will suffer heat stroke. Heat stroke is recognised by hot, dry skin and the casualty may be confused, lose coordination, feel nauseous and may collapse. Communication if any will be confused and the person will be disorientated.

To treat heat stroke you should take the casualty out of the heat, remove excess clothing and cool them down rapidly. This can be achieved by wrapping them in soaked towels or items of clothing. Wrapped ice packs can be placed where there are large blood vessels, including the armpits, groin and around the neck. Give the casualty small sips of cool water if they are able to swallow. An ambulance must be called in the event of heat stroke as this will quickly lead to serious complications and potentially death.

38. What are the signs & symptoms of Heat Exhaustion?

- a) Casualty may feel dizzy, weak and nauseas
- b) Casualty may have hot and sweaty skin
- c) Both A and B

39. How would you manage Heat Exhaustion?

- a) Take casualty out of heat, remove excess clothing and cool them down
- b) Leave all clothing on and give them a cold drink

40. What are the signs & symptoms of Heat Stroke?

- a) Hot and dry skin
- b) Casualty may feel confused, lose coordination, feel nauseous and may collapse
- c) Both A and B

41. How would you manage Heat Stroke?

- a) Keep casualty in the heat and give them water
- b) Take the casualty out of the heat, remove excess clothing and cool them down fairly quickly
- c) Give them a drink and cool them down very slowly

MUSCULOSKELETAL INJURIES

Fractures

Fractures are usually caused when there is a history of trauma or impact to the body. Fractures might be recognised by: **pain** at the site of injury, **bruising** &/or **swelling**, **loss of function** and possibly **deformity**. Fractures can be simply described as closed / open / complicated.

Closed fractures - the skin is intact – **no** external bone protrusion or external bleeding

Open fractures – the skin is damaged and the bone protrudes through the skin, often causing bleeding

Complicated fractures – there is damage to large blood vessels, nerves, organs or the bone is severely damaged. Complicated fractures can pose a threat to a person’s life and should always be treated urgently.

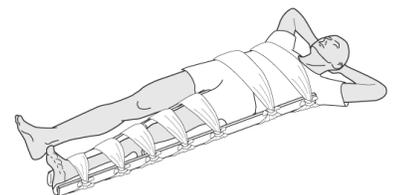


using a sling can assist in supporting the limb

The **management** of fractures involves 2 key actions: **IMMOBILISE AND SUPPORT**.

We need to keep the injured part from moving and help the casualty support it. This can be achieved by using splints and slings or even simple techniques such as tying the injured limb to the body (bodiesplint) or resting the broken limb against a supportive object or surface. Never attempt to re-align or straighten a deformed limb. The casualty is likely to be in shock and so rest and reassurance is required.

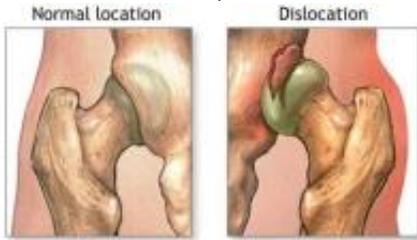
The **management of open fractures** involves the added difficulty of bleeding control. If the bleeding is serious, indirect pressure can be applied around the protruding bone, e.g. donut bandage.



Splinting with a firm object helps to immobilise the limb

Dislocations

A dislocation is a separation of bones at a joint. A dislocation may be recognised by severe pain, swelling, bruising, unnatural movement and deformity at the joint. Common areas of dislocations are shoulders, fingers and knees.



The management of a dislocation is very similar to that of a fracture and involves immobilization and support of the injured part. This could involve the use of slings or simple support measures. In the case of a dislocation we apply ice or a cold compress to the injured part to help reduce pain and swelling. If it is impossible to tell whether the injured joint is a dislocation or a fracture, then we treat it as a fracture and avoid applying ice to the affected area.



Sprains and Strains

A **sprain** is an over-stretching or tearing of ligaments at a joint and a **strain** is an over-stretching or tearing of muscles or tendons. The sprain is most common in the wrists and ankles. To recognise a sprain we look for: pain, swelling, bruising & partial loss of function in the joint. For both the sprain and the strain we apply the RICER principle **REST, ICE, COMPRESSION, ELEVATION, REFERRAL**. **Rest** the casualty, **raise** the injured part, apply a **compression** bandage to the injured joint and then apply an **ice** pack to the area. Ice should be applied for 20 minutes (in 2 x 10 minute intervals) every 2 hours. The



casualty should then seek medical advice.

42. To manage a fracture, we would:

- a) Immobilise and support in a position of comfort
- b) straighten and deformity and bandage

43. To manage a dislocation, we:

- a) Immobilise and support in a position of comfort
- b) Put dislocated joint back in place with force

44. A sprain is treated by applying the RICER principle. What does RICER stand for?

- a) Rest, Ice, Compression, Elevation, Rest
- b) Rest, Ice, Compression, Elevation, Referral
- c) Rest, Immobilise, Compression, Elevation, Referral

Spinal Injuries

A spinal injury should always be suspected if a casualty has suffered a physically traumatic event such as being struck by a car, thrown from a motorbike/car, fallen from a height etc.

If the **conscious** casualty has pain in the neck or back, any strange tingling sensations in any part of their body or is unable to move any part of their body, then **they should remain still and comforted** whilst awaiting an ambulance. If the casualty is **unconscious** on their back, then protecting the airway will take priority and the casualty will need to be rolled **very carefully into the recovery position**, avoiding any forward or twisting motion of the neck and spine. If you are trained or have help, adopting a spinal roll to move the casualty into the recovery position would be preferable.



45. A person with a spinal injury who is unconscious and lying on their back must still be rolled into the recovery position to protect their airway.

a) TRUE

b) FALSE

CRUSH INJURY

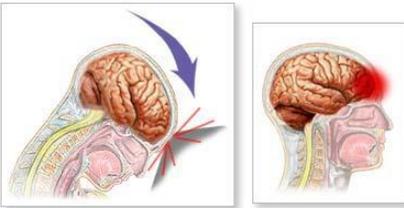


You should attempt to free a person who has a crushing force lying across their body as soon as possible if it is safe for you to do so. Prolonged crushing forces on large limbs can cause serious harm and potentially death. When the crushing force has been removed, be prepared to treat for bone and tissue damage and potentially serious bleeding.

If you suspect the crushing force has been in place for well over an hour, it may be advisable to seek the advice of emergency services prior to removal as this prolonged exposure to a crushing force on large limbs may create dangerous toxins which may be released into the body when the force is removed. Any crushing force to the head, chest or abdomen needs to be removed immediately regardless of time.

HEAD INJURIES

A concussion is a violent jarring or shaking that results in a disturbance of brain function



If a casualty has suffered an impact to the head, it is important to assess for the possibility of concussion or a more serious head injury. Concussion is usually a temporary disturbance to brain function that is caused by a violent shaking of the brain.

Signs & Symptoms of concussion may include:

Headache, Nausea, memory loss, blurred vision, drowsiness, confusion, agitation, temporary loss of consciousness.

All casualties who show signs or symptoms of concussion should be seen by a doctor as their condition may worsen over time. If the person has been unconscious for any period of time or is confused, agitated or has memory loss they should be observed in a hospital.

Where there is any swelling or bleeding on the brain, the casualty may suffer cerebral compression. This can be fatal and any sign of cerebral compression must be treated as **urgent and an ambulance called**. It can occur many hours after the incident.

Signs & Symptoms of Cerebral compression may include:

Pupils of unequal size, Seizures, fluids or blood coming from nose, ears or eyes, numbness or weakness down one side of the body, noisy irregular breathing.

A **conscious** person with a head injury or concussion is **best rested laying down with the head slightly elevated and treated for shock**. An **unconscious** head-injured casualty must still be placed into the recovery position as the airway is still our priority.

It is recommended that all people showing signs of concussion, including mild, seek medical assistance.

46. What are some signs and symptoms of concussion?

- a) Casualty is energetic and talking a lot
- b) b) Casualty may have a headache, feel nausea, blurred vision, appear drowsy

47. How is a casualty suffering a head injury or concussion managed?

- a) If conscious, laying down with the shoulders & head slightly elevated. If unconscious place in recovery position.
- b) Sit the casualty straight with an ice pack on their head

POISONS & DRUGS

Poisons can enter the body via: **ingestion, inhalation, absorption or injection**. It is important for the first-aider to gather information for medical professionals: **WHAT – WHEN – HOW MUCH**. What poison was the casualty exposed to, when it happened, and how much of the poison they were exposed to, e.g. A child has taken medications: **WHAT- Panadeine Forte: WHEN – 2 minutes ago: HOW MUCH – 2 tablets**

It is important to keep any packaging for prescription medications for paramedics or doctors to see. If you are uncertain of what to do in a poisoning episode, the **POISONS INFORMATION** service can provide support and treatment advice. The phone number for **POISONS INFORMATION SERVICE** is **13 11 26**.

When treating someone who has taken a drug, it is also important to attempt to gather as much information as possible. What, When and how much is helpful here. If the person is conscious and distressed, attempt to keep them calm until help arrives. A person who unconscious due to drug and alcohol excess must have their airway protected and placed in recovery position.

If by chance you get jabbed with a needle during the rescue of an intravenous drug user, wash the area well with soapy water. Carefully collect the syringe and place into a hard container. This reduces further risk of harm but may also be useful for testing if there are any concerns.

48. What is the number for poisons information service?

- a) 1800 POISONS
- b) 1300 POISONS
- c) 13 11 26

49. What information is required when dealing with a victim of poisoning / drug overdose?

- a) What, when, how much
- b) How much only
- c) When only

BITES & STINGS

Snakes & other Venomous Creatures

The bites of venomous snakes, spiders & some marine creatures should be managed by applying the **pressure immobilization technique**. **Any Snake, Funnel web spider (found in Eastern Queensland, NSW and Northern Victoria), Blue ring octopus and the Cone shell (found in tropical Australia)** will require the use of this technique. The **pressure immobilization technique** involves the following action: Apply 3 to 4 windings of a roller bandage directly over the bite site ensuring not to wipe away any venom. (This is needed for snake identification by doctors). A piece of gauze or melonin may be applied first in order to take a sample of venom if it is available. Then start bandaging the limb, starting just above the toes (or fingers) and bandage up the limb as far as possible. The bandage should be a little firm like a sprain bandage but should not be stopping blood supply to the limb. The limb should be immobilised by applying a splint or by tying it to the other leg. The casualty should then be rested, kept still and reassured while awaiting the arrival of medical aid.



The pressure immobilisation technique slows down the venoms movement



The **RED BACK SPIDER** is dangerous however the venom is **not** highly toxic and is slow to move through the body. The bite is very painful. The Red back spider bite should be **treated for pain by applying ice to the area of the bite** and seeking medical aid where observation and treatment can be provided.

Insect Stings

The painful **bites & stings of insects** should be treated by applying **ice to the area and elevation of the limb**. Bees, Wasps, centipedes and ants are typical examples of these insects.



Jellyfish

Jellyfish in Australia all cause pain, but deadly jellyfish are only found in the northern tropical beaches. Southern water jellyfish stings are treated for pain. The **bluebottle is treated by applying heat** to the painful area. If heat is not available then an ice or cold compress can be applied. All **other Jellyfish** in southern waters are treated with **ice or cold compresses** for pain.

The BOX and the small IRUKANJI JELLYFISH inflict a sting with onset of severe generalized pain occurring 20-40 minutes after the sting. The venom of these jelly fish can cause death if not treated urgently. The tentacles will need to be removed by first applying vinegar to them and then carefully picking or scraping them off. A victim of a major sting from either the BOX or IRUKANJI BOX jellyfish will need urgent medical attention and possibly CPR. Vinegar can be found on popular beaches with these Jelly fish.

50. The pressure immobilization technique is used for the bites or stings of which creatures?

- a) Bee, wasp, mosquito, jelly fish
- b) Snake, funnel web spider, blue ring octopus, cone shell

SEIZURES

Seizures can be caused by a number of conditions including epilepsy, head injuries, diabetes, drugs, alcohol and other complications. Uncontrolled electrical signals from the brain cause the muscles of the body to violently contract and relax. The patient often falls to the floor suffering with rigid and jerking muscle spasm of the body which is followed by blueness to the skin and frothing to the mouth. No matter what the cause of the seizure we handle the casualty in the following way: During the seizure we remove any dangers that may harm the casualty, place something soft under the head and allow them to have the seizure unrestrained. Once the seizure subsides, place the casualty into the recovery position to ensure the airway is clear. **If the cause of the seizure is unknown or caused by a serious incident then we always call an ambulance.**

With a casualty who is known to have epilepsy we need only call an ambulance if:



- a) the seizure is still going at 5 minutes (it is a good idea to time seizures)
- b) the casualty injures themselves seriously during the seizure
- c) the casualty has a second seizure shortly following the first

If there is an individual medical management plans for a person with epilepsy, this should be followed as directed. Some people with Epilepsy may require ambulance transport to hospital.

51. What may cause a seizure?

- a) Head injuries, drugs, diabetes, alcohol b) Epilepsy c) Both A and B

52. How is a seizure managed?

- a) Make the area safe and protect the person during the seizure. Once seizure subsides, place casualty in recovery position
b) Once seizure subsides, leave casualty – no action needs to be taken

DIABETES



Diabetes is a condition in which there is a problem with insulin production in the pancreas. Insulin helps to regulate the sugar levels in the blood. If the blood sugar levels are either too high - Hyperglycemia, or too low - Hypoglycemia, a person will experience a diabetic episode. The most common and dangerous of diabetic condition is caused by low blood sugar levels (Hypoglycemia). A person suffering with diabetes can control this condition with regular insulin injections or tablets, along with a controlled diet.

A glucometer to measure blood sugar levels

Recognition of Hypoglycemia: cold pale moist skin, , hunger, dizziness, shaking, weak and light headed, confused or aggressive/agitated



Glucagen Injector for fast help with serious Hypoglycemia

Management: Give patient a large spoonful of honey or if not available a sugar drink (not diet); lolly or chocolate
Seek Medical Assistance.

Recognition of Hyperglycemia: Hot dry skin, thirst, need to urinate, smell of acetone on the breath (like nail polish remover), drowsiness and extreme tiredness, increase in urine output, unconsciousness

Management: The management of Hyperglycemia requires some level of training and expertise – **you should never give insulin to a casualty** as this can cause great harm. **Insulin can only be administered if the casualty is fit and able to determine their own blood sugar levels and administer appropriately or administered by trained individuals or medical personnel.** If the patient becomes unconscious, clear the airway and follow the Basic Life Support Flow Chart.

Hypoglycemia (low blood sugar level) is the most common emergency. It is difficult to know whether blood sugar levels are high or low to the untrained person. If this is the case, then the casualty should be treated for low blood sugar levels. This will not harm the person if the blood sugar levels are high, but if there is no improvement in the casualty, call for immediate medical attention.

An easy way to remember the difference between “hypo” and “hyper” is:

HYP0 – low fuel ▶ cold skin ▶ patient needs sugar

HYP0 – plenty of fuel ▶ hot skin ▶ patient needs insulin

53. What treatment is given to a diabetic if we are not sure whether the casualty has high blood sugar levels or low blood sugar levels?

- a) Give something sugary to eat or drink
- b) Give insulin

DROWNING

The most significant consequence of near drowning and drowning is interruption of the oxygen supply to the brain. Early rescue and resuscitation are the major factors in survival.

Safety is a key priority in dealing with drowning. A rescue must never be attempted if it poses a threat to the rescuer. After checking for response and attempting to clear the airway, check for breathing and commence CPR immediately if breathing is not present. Drowning victims may bring up fluids or vomit during resuscitation. If this occurs, turn the casualty on to their side until the fluid stops draining. Continue CPR if necessary. ALL VICTIMS OF NEAR DROWNING SHOULD BE ASSESSED IN HOSPITAL. This is due to the risk of delayed lung complications which are common, especially with salt water drownings.

54. What should you do if a person you have pulled out of water is not breathing?

- a) Commence CPR immediately
- b) Wait for ambulance
- c) No action required



55. What will you do if a casualty brings up vomit during CPR?

- a) Turn the casualty to their side until the vomit is cleared and then re-commence CPR if needed.
- b) Continue CPR without stopping to clear the vomit

