NEW ZEALAND
RED CROSS

ESSENTIAL EMERGENCY CARE
FOR FIRST AIDERS

New Zealand Red Cross teaches New Zealanders to cope in a crisis, and has been teaching first aid for many years. All the topics covered in first aid and emergency care courses are contained in this book, which provide a vital reference for all people.

WHAT DO YOU DO WHEN?

Your father collapses after complaining of indigestion all day.
Your daughter gashes her foot on broken glass.
You're first on the scene when a pedestrian is hit by a car.
One of your team mates sprains an ankle during practice.
Your toddler chokes on a piece of apple.

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This book contains Emergency Care information and is intended to supplement and revise information learned on New Zealand Red Cross First Aid courses.

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WHAT IS EMERGENCY CARE?

Emergency care is the first aid and first help or treatment given to a sick or injured person (called a casualty) before the arrival of further medical assistance.

EMERGENCY CARE AIMS

In emergency situations, injuries or medical conditions can

- kill in minutes
- or within hours
- or some not at all.

The aim of the first aider is to save life and reduce suffering.

In emergency care, the DRSABC cycle is used to assist the first-aider to identify, prioritise and treat any problems.

ESSENTIAL EMERGENCY CARE ACTION PLAN

What is DRSABC?
DRSABC is an abbreviation for the casualty primary assessment process used by the New Zealand Red Cross and stands for:

Dangers, **R**esponse, **S**end for help, **A**irway, **B**reathing and **C**irculation.

Many countries use the DRS ABC casualty assessment process at all levels of care.

DRSABC places the **Dangers/Safety** of the rescuer, bystander and the casualty as the first priority. The rescuer then checks for a **Response** from the casualty and considers **Sending** for help at an early stage in the assessment. The casualty is then assisted by using simple and logical steps to ensure a clear **Airway**, and assessing and ensuring **Breathing** and **Circulation**.

The purpose of DRSABC is to assist rescuers to identify these injuries or medical conditions and treat the casualty until the ambulance or advanced care arrives. DRSABC is used as the guide for emergency care given to casualties in all situations.

The DRSABC sequence can be repeated as required until help arrives.

EMERGENCY CARE STEPS

The steps of first aid are to:

Recognise an emergency exists.

Decide to act. Stay **calm**.

Ensure the **Safety** of scene, self, bystanders and casualties.

Identify the injuries or illness:

- Listen to or look for the history of the incident.
- Look for signs.
- Listen to the casualty for symptoms.

Assess the seriousness of the injuries or illness:

- Assess ABC's
- Expose injuries.

Manage the injuries using the methods outlined in this book.

RECOGNISE

DECIDE

SAFETY

IDENTIFY

ASSESS

MANAGE

PRIMARY ASSESSMENT – DRSABC

Following the simple DRSABC process below, the first-aider makes a PRIMARY ASSESSMENT to locate any immediately life-threatening conditions. The findings will indicate any action to be taken. Depending on your findings you may need to commence CPR.

Repeat the DRSABC sequence as needed.

	Observe/Check	Action
DANGERS	Scene safety for: ■ yourself ■ bystanders ■ the casualty	If possible, remove danger from scene or remove the casualty from danger
RESPONSE	Check for response	Shout and tap
SEND FOR HELP		Send for help immediately if no response
AIRWAY	Consider airway obstruction	If no response open airway Consider airway obstruction
BREATHING	If not breathing. If breathing.	Commence CPR. Make sure breathing is easy and not obstructed.
CIRCULATION	If not breathing If bleeding. If showing signs of shock.	Commence CPR. Control bleeding. Manage shock and observe.

If no life-threatening conditions are found commence a SECONDARY ASSESSMENT.

USING DRSABC – A PRACTICAL EXAMPLE

Below is a practical example of how First aiders can use DRSABC.

You are walking through the park when you see an elderly man stumble and fall. When you go to help you notice he is trying to get up and has blood coming from a wound to his hand. You decide to act.

DANGERS	**Ensure safety for self, bystanders and casualty** You check the scene for obvious danger and note the presence of blood. You put on gloves.
RESPONSE (AVPU)	**AVPU** (see next page) You ask him if he is OK. He speaks to you. He is alert. You introduce yourself and ask if you can help him.
SEND FOR HELP	**Send/shout for help.** You ask bystander for help.
AIRWAY	The casualty is talking easily and has no obvious airway problem.
BREATHING	You ask if he is OK. Breathing is rapid.
CIRCULATION	Casualty appears pale and says he feels light headed. You send bystander to dial 111 because of the signs of shock.
SPECIFIC CARE	You lie the casualty in the shock position. You treat the hand wound. You check that the ambulance is on the way. You ask if the casualty has a history of heart-related problems, they say yes. You check for other injuries and cannot find any.
GENERAL CARE	You keep the casualty warm and reassure him. You stay until the ambulance arrives.

DANGERS

Ensure Scene Safety for yourself, bystanders and the casualty.

Movement from Dangers

Only move a casualty if there is a clear reason to do so.

The one person drag is the best way for the lone rescuer to move the casualty from danger. A blanket may also be used.

One person drag

RESPONSE - LEVELS OF CONCIOUSNESS

The casualty's response is a measure of their **Level of Consciousness**. An initial check of consciousness is performed in the Primary Assessment using the **Shout and Tap** method. Further, more detailed assessment of a casualty's level of consciousness should be made as part of the Secondary Assessment.

The check should be repeated at regular intervals and medical personnel should be advised of any patterns. Patterns may show changes in the casualty's condition.

	Levels of Consciousness:	Response
A	**ALERT** and fully responsive	Talks and responds to questions appropriately. ■ What time of the day is it? ■ What sport were you playing? ■ What town are you in? Talks, but may be confused. May repeat questions several times, forgetting that answers have been provided. May start to become drowsy.
V	Drowsy but responds to **VOICE**	Obeys instructions ■ move your arms ■ open your eyes or responds to instructions by grunting, groaning, moving the head, or similar attempts to acknowledge
P	Unconscious, does not respond to voice but responds to **PAIN**	Does not speak or respond to instructions. Moves away from painful stimuli. Moves head away or grimaces when the earlobe is pinched
U	**UNRESPONSIVE** Unconscious	Does not speak. Does not respond in any way to pain or voice

SEND/SHOUT FOR HELP – get someone to send for help – DIAL 111

HEAD-TILT, CHIN-LIFT

Place one hand on the forehead and two fingers of the other hand on the bony part of the chin. Tilt the head back using the hand on the forehead, and at the same time lift the jaw upwards with the fingers of the other hand.

AIRWAY

If a casualty is unconscious they will be unable to maintain an open airway to allow air to enter the lungs. Opening the airway of a non-breathing unconscious casualty may be the only step required to save their life.

Open their airway using **head-tilt**, **chin-lift**.

Head-tilt, Chin-lift

BREATHING

When we breathe, the body uses only part of the oxygen we breathe in, so there is still oxygen in the air when we breathe out. This is why the rescuer's breath can be used to provide a casualty's oxygen needs.

If a casualty is breathing adequately, put them in the **Recovery Position**.

The normal adult breathing rate is 12-20 breaths per minute. Children and infants breathe at a faster rate.

CIRCULATION

The heart beats to pump blood around the body.
Breathing is a sign of Circulation.

If there is no circulation, normal body activity will cease.

Commence CPR.

Major **Bleeding** must be managed early to prevent shock developing. Use direct pressure and elevation to control severe bleeding.

Minimise **Shock** by laying the casualty down, keep them warm and reassure them.

Pale, cold sweaty skin, a weak rapid pulse, and rapid breathing indicate shock. See section on Shock.

NOTES

UNCONSCIOUSNESS

Unconsciousness may occur for a number of reasons. Head injury, low blood sugar in diabetes, epileptic seizures and strokes can all result in unconsciousness.

Identify and assess unconsciousness

There are degrees of unconsciousness. A deeply unconscious casualty will not be able to speak or respond to what you say. The AVPU chart on page **7** provides methods to check levels of consciousness.

Initially you will have identified unconsciousness during the Primary Assessment using the **Shout and Tap** method.

Manage unconsciousness

- Obtain help. Send someone to **Dial 111** for an ambulance.
- Check for any injury or illness using the Secondary Assessment.
- Do not give any food or drink.
- Place casualty in the recovery position.

The major danger to an unconscious casualty is airway obstruction from the tongue.

NOTES

THE RECOVERY POSITION

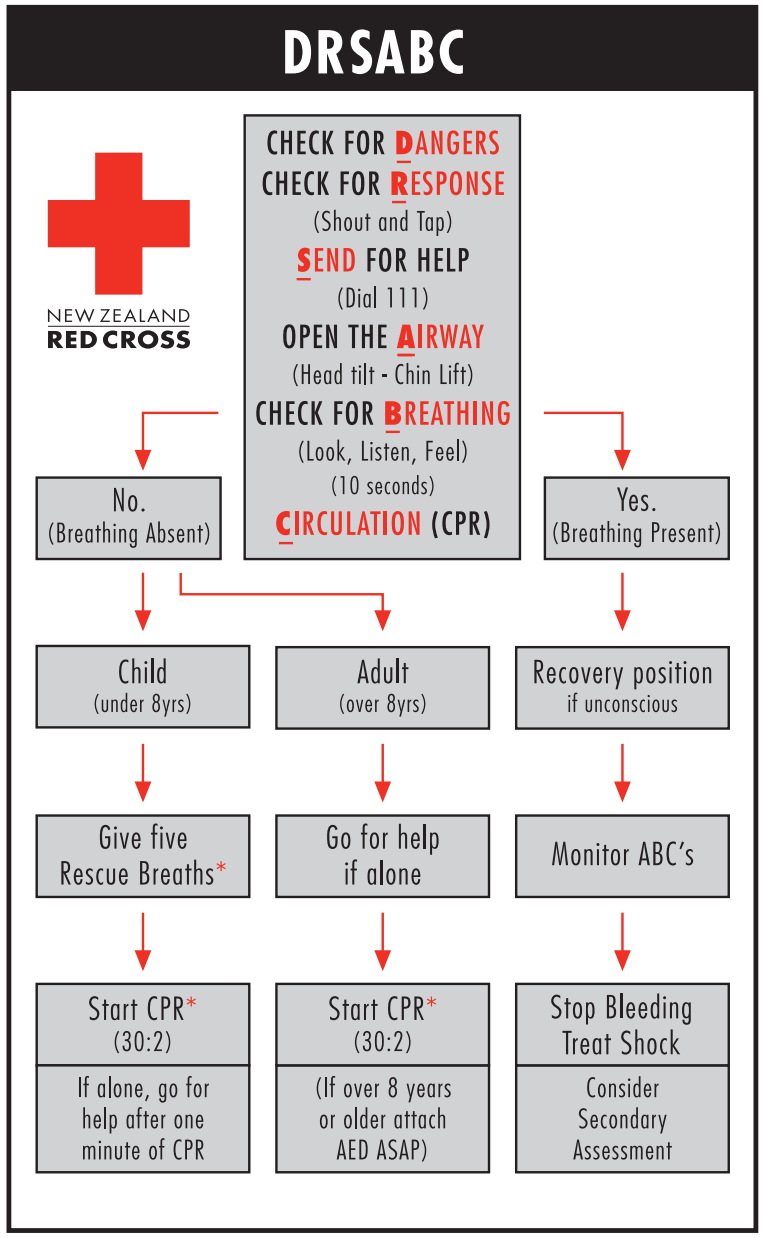
The recovery position is designed for unconscious casualties. It helps to maintain an open airway and allows vomit and other fluid to drain freely from the mouth.

All unconscious casualties should be placed in the Recovery Position.

Recovery position

Where you suspect neck or spinal injuries in an unconscious casualty, log roll them on their side, supporting their head and keeping the spine in line. (See Log Roll).

DRSABC - CPR WALLET CARD



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RESUSCITATION

	ADULT over 8 years	CHILD 1 - 8 years	CHILD 0 - 1 years
Start with	compressions	5 rescue breaths	5 rescue "PUFFS"
How compressions performed	2 hands centre of chest	1 hand centre of chest	2 fingers just below nipple line
Compressions to breaths	30:2	30:2	30:2
Compressions per minute	100	100	100

RE-ASSESS EVERY 3 MINUTES

For All Your First Aid Training Needs Nationwide Phone
0800 RED CROSS (0800 733 276)
website www.redcross.org.nz

AIRWAY

BREATHING

CIRCULATION

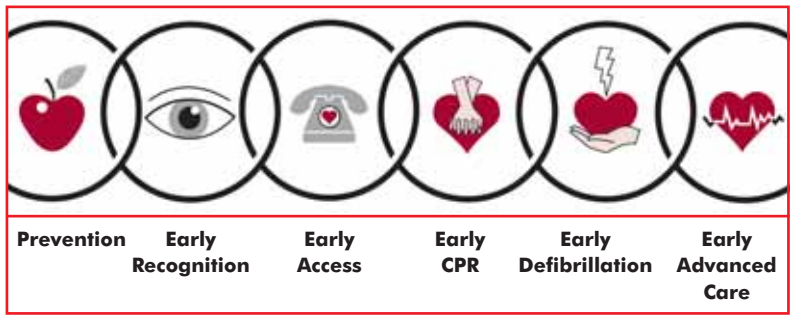
NOTES

RESUSCITATION

The aim of CPR is to provide oxygen to the brain and heart until appropriate advanced Cardiac Life Support can restore normal heart beat and breathing.

Most adults requiring CPR are as a result of a heart problem so an emphasis is placed on early access to 111 and early CPR.

CHAIN OF SURVIVAL



ADULT RESUSCITATION

1 Open airway and position the casualty with head tilt and chin lift

2 Look, listen and feel for breathing for no more than 10 seconds

3 If there is no breathing, identify the centre of the chest

4 Complete 30 chest compressions on the centre of the chest

5 Give two effective breaths

6 Continue CPR at a ratio of 30:2 compressions breaths.

CPR
RATIO 30:2
30 compressions:
2 breaths

DRSABC – ADULT RESUSCITATION

DANGERS	Ensure safety for self, bystanders and casualty
RESPONSE (AVPU)	If unresponsive
SEND FOR HELP	**Send/shout for help.** Send bystander to dial 111.
AIRWAY	Open airway by head tilt chin lift
BREATHING	Look, Listen and Feel for 10 seconds. If NO BREATHING; COMMENCE CPR If ALONE, go for help
CIRCULATION	Commence CPR: 30 compressions / 2 breaths
SPECIFIC CARE	Recheck for breathing every 3 minutes If NO BREATHING, continue with CPR.
GENERAL CARE	

DEFIBRILLATION AND AED'S

Continue to perform CPR on a casualty whose heart has stopped until the arrival of an ambulance or an Automated External Defibrillator (AED). Early defibrillation significantly improves the chances of survival.

A defibrillator is an electronic device that is designed to apply an electrical impulse through the patient's chest in an attempt to restore the heart muscle to normal contractions (beating), after it has gone into a chaotic rhythm during a cardiac arrest.

Defibrillators are simple to use and the automatic commands are easy to follow. An AED can check a person's heart rhythm and recognise a rhythm that requires a shock. It advises the rescuer when to shock, and uses voice prompts, lights and text messages to tell the rescuer what to do.

USE AN AED TO DEFIBRILLATE

THE STEPS OF RESUSCITATION FOR ADULTS

CPR ACTION CHECKLIST

1. Check for **Dangers/safety**
2. **Response:** Shout and tap the casualty to see if they respond
3. **Send** for HELP
4. **Airway** open
   - Position casualty with *head tilt and chin lift*
5. Check for **Breathing**
   Look, listen and feel for breathing (no more than ten seconds)
   - If no breathing, commence CPR
   - If breathing and unconscious, put casualty into recovery position
   - Monitor for breathing, treat for shock
6. **Circulation**
   - Commence CPR (compressions: 30)
   - Position casualty laying on their back on a flat surface
   - Position heels of hands on centre of chest
   - Rate of compressions: 100 per 1 minute
   - Smooth up and down pressure
   - 4-5 cm deep (1/3 depth of chest)
7. Give two effective breaths, over 1 second each
   - An effective breath is when the chest begins to rise.
8. **Continue CPR at a ratio of 30:2 (30 compressions to 2 breaths)**
9. **Recheck for breathing after 3 minutes**
   - If no breathing, continue with CPR
   - If breathing and unconscious, put casualty into recovery position

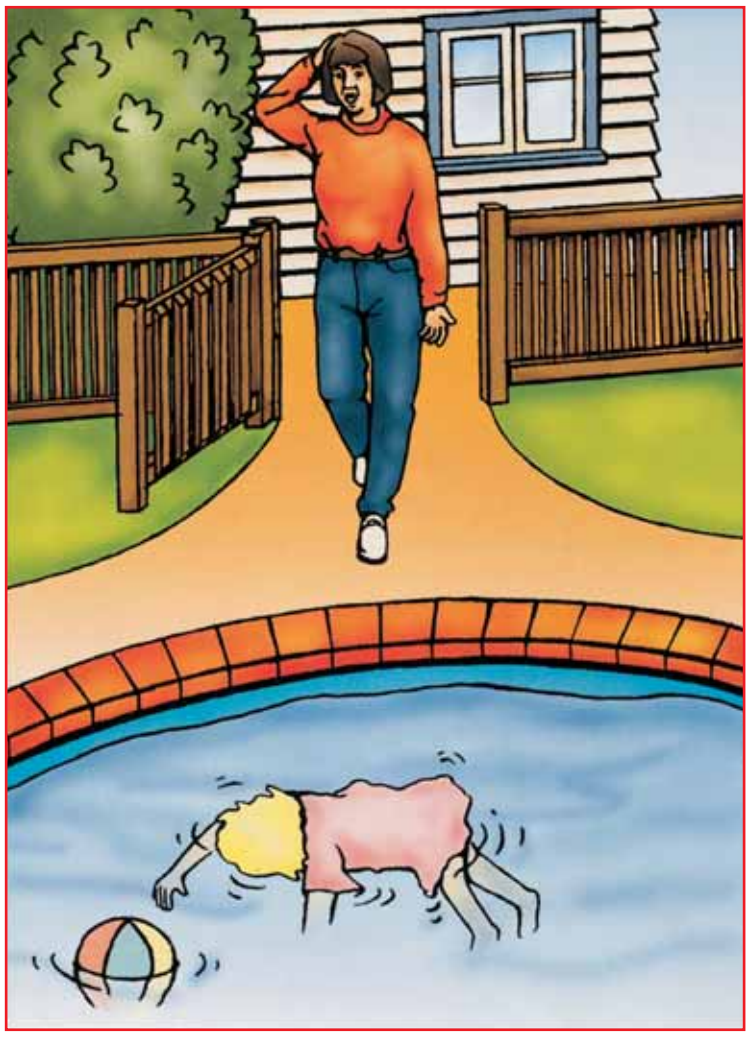
RESUSCITATION – CHILD

Children (and children under 1 year)

For the purposes of resuscitation a child is considered to be aged 8 years and below.

Unlike adults, children are rarely affected by cardiac arrest due to heart attack. Most non-breathing children are the result of Airway and Breathing problems.

Therefore a greater emphasis is placed on breathing, and we start **CPR with 5 initial breaths.**



BREATH FIRST

CALL FAST

When you are alone and the child or baby is not breathing, perform resuscitation for one minute then Dial 111 for an ambulance, if a telephone is immediately available.

CPR ACTION CHECKLIST – CHILD

1. Check for **Dangers/safety**
2. Check for **Response**
3. **Send** for HELP
4. **Airway** open
   - Child – Head Tilt/Chin Lift
   - Infant - Move head into neutral position
5. Check for **Breathing**
   Look, listen and feel for breathing (no more than ten seconds)
   - IF NOT BREATHING, give 5 initial rescue breaths
6. **Circulation**
   - Commence CPR 30 Compressions
   - Rate of Compressions: 100 per minute
   - Smooth up and down pressure
   - Child 1-8yr – Position 1 hand on the centre of the chest
   - Child under 1yr – 2 fingers just below the nipple line
7. **Give two effective breaths – an effective breath is when the chest begins to rise**
8. **Continue CPR at a ratio of 30:2 (30 compressions to 2 breaths)**
9. **Recheck for breathing after 3 minutes**
   - IF NO BREATHING, continue with CPR
   - IF BREATHING AND UNCONSCIOUS. Put casualty into recovery position.

DRSABC – RESUSCITATION – CHILD UNDER 8 YRS (INCLUDES INFANT)

DANGERS	**Ensure safety for self and casualty**
RESPONSE (AVPU)	If unresponsive
SEND FOR HELP	**Send/shout for help.** Send bystander to dial 111 IF ALONE, stay with the child
AIRWAY	Child 1-8yr – Open airway by Head Tilt / Chin Lift Child under 1yr – Open airway by moving head into neutral position
BREATHING	Look, Listen and Feel for 10 seconds. If NO BREATHING; give 5 initial breaths If ALONE, go for help after 1 minute CPR
CIRCULATION	Commence CPR: 30 compressions : 2 breaths If ALONE, go for help after 1 minute CPR
SPECIFIC CARE	Recheck for breathing every 3 minutes If NO BREATHING, continue with CPR.
GENERAL CARE	

NEAR DROWNING

Consider your own safety before entering the water to rescue a casualty, especially in deep water.

Signs and symptoms of near drowning

- Difficulty in breathing or breathing stopped.
- Frothing around the mouth.
- Little or no response.

Manage near drowning

Call for help as soon as possible.

- Dangers – check for safety.
- Response – check response.
- Send for help – **Dial 111.**
- Airway – If not breathing normally, start **CPR 30:2** immediately.
- Put into recovery position when breathing on own again.
- Keep warm.
- A near drowning casualty **must** be seen by a doctor.

Notes: – Spontaneous breathing can occur as a person becomes unconscious and their muscles relax.
– Be prepared for vomiting.

NOTES

CHOKING

Any person who indicates they are choking or are clutching their neck should be considered as possibly having a **foreign body airway obstruction**, i.e. choking. They may suddenly stop breathing and fall unconscious for no apparent reason.

The management of choking will depend on the degree of airway blockage and whether the casualty is conscious or unconscious.

Identify and assess choking

The choking casualty is often identified by the history surrounding the event:

- An adult eating a meal begins to cough and wheeze.
- A child playing tag and eating lollies is found unconscious and not breathing.
- An infant sitting by a brother or sister eating peanuts stops breathing.

In these situations a foreign body airway obstruction should be suspected. In addition, the choking casualty may:

- Clutch at their neck.
- Be unable to talk, cough or breathe.

Manage adult choking

- Ask the casualty, 'Are you choking?'
- If the casualty is coughing they should be encouraged to continue with attempts to expel the foreign body.
- If the casualty is unable to talk, cough or breathe, the obstruction should then be managed using **back blows** and, if needed, **abdominal thrusts** (Heimlich Manoeuvre).

Back blows

If the airway is completely obstructed, give up to 5 back blows to attempt to clear the airway.
Back blows should be performed as follows:

- Stand to the side and slightly behind the casualty.
- Support his/her chest with one hand and lean him/her well forward, so that when the obstructing material is dislodged, it comes out of the mouth rather than going further down the airway.
- Give up to 5 sharp blows between the shoulder blades with the heel of your other hand.

Each individual blow should be a separate action, with the intent of relieving the obstruction. If the obstruction is not relieved by back blows, perform abdominal thrusts.

Abdominal thrusts

Abdominal thrusts create an artificial cough intended to move and expel the foreign body obstructing the airway. Abdominal thrusts should only be performed on conscious casualties. If the casualty becomes unconscious, commence CPR.

Abdominal thrusts
Conscious – adult

- Stand behind casualty.
- Wrap arms around casualty's waist.
- Make a fist with one hand.
- Place thumb side of fist against the casualty's abdomen slightly above the navel, well below the tip of the breastbone.
- Grasp the fist with the other hand.
- Press the fist into the casualty's abdomen with a quick inward and upward thrust.
- Repeat until the object is expelled, or the casualty becomes unconscious.

Chest thrusts

Abdominal thrusts cannot be used on women in advanced stages of pregnancy, nor on obese persons where it is not possible to encircle the waist with the arms. In these cases chest thrusts are used.

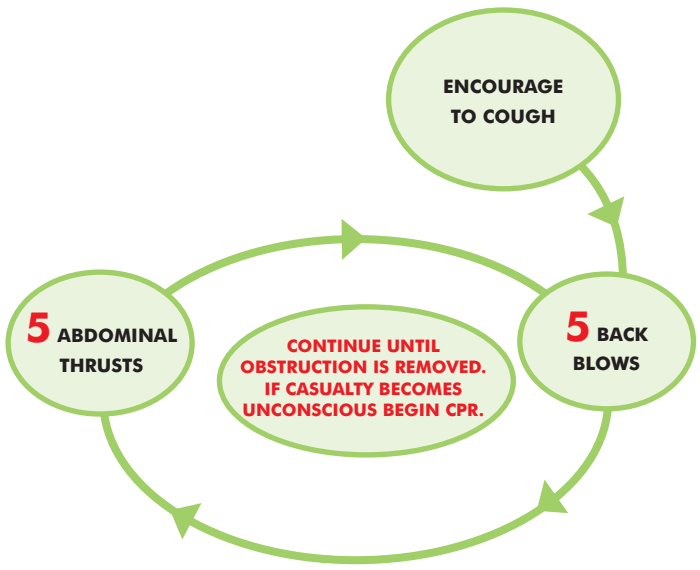
Chest thrusts conscious

- Stand behind the casualty, place your arms under the casualty's armpits and encircle the casualty's chest.
- Make a fist and place the thumb side of the fist over the breastbone, avoiding the lower tip. (The location is the same as that used in the chest compressions for CPR.)
- Grasp the fist with the other hand.
- Pull the fist towards you in a quick movement.
- Administer thrusts until the object is dislodged or the casualty becomes unconscious.

OBSTRUCTED AIRWAY – CONSCIOUS

Obstructed airway cycle – adult/child 1-8 yrs Conscious

The complete actions for dealing with choking in a conscious adult are as follows:



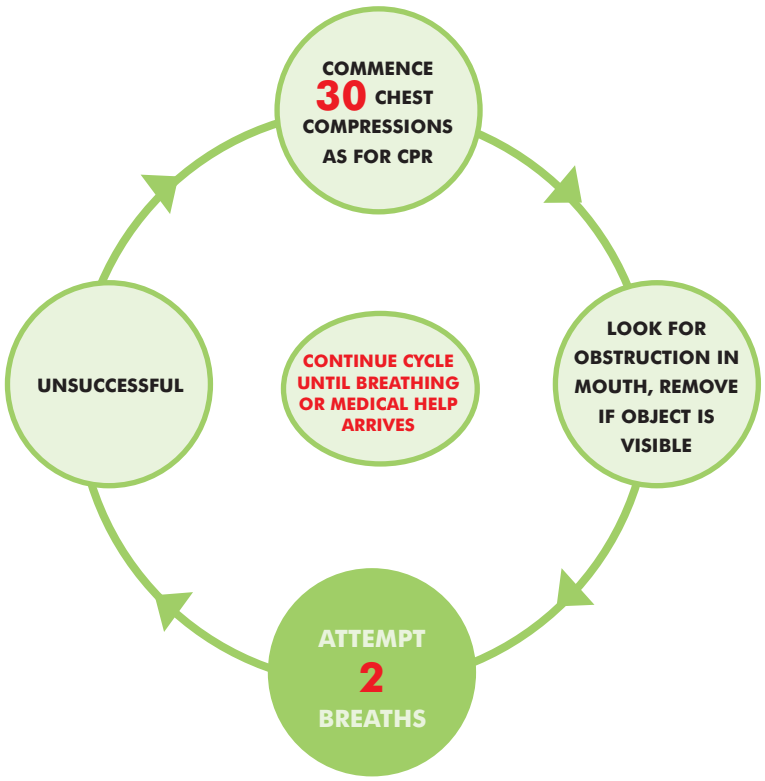
If the adult/child casualty becomes unconscious or is found unconscious

If foreign body obstruction is suspected, then follow the standard sequence for child/adult CPR. In addition, each time the airway is opened, look for the obstructing object in the back of the throat. If the object is visible, remove it using a finger.

Repeat the sequence of airway examination/attempted rescue breaths/chest compressions until the object becomes dislodged or advanced help arrives.

OBSTRUCTED AIRWAY – UNCONSCIOUS

Obstructed airway cycle – adult – Unconscious
The complete actions for dealing with choking in an unconscious adult are as follows:



NOTES

CHOKING – CHILDREN

There are some changes made to choking techniques when dealing with a child or baby. The major differences are outlined below.

Children

Open the mouth. If a foreign body is seen, remove it: do not finger sweep if no foreign body is seen.

Children aged 1-8 years who are chocking and conscious – treat same as adult choking.

CHILDREN UNDER 1 YEAR CONSCIOUS

For children under 1 year old – baby choking the sequence for conscious infants is quite different and is stated below:

CHILDREN UNDER 1 YEAR: CONSCIOUS CHOKING	CHILDREN UNDER 1 YEAR: UNCONSCIOUS CHOKING
1. Place the infant down straddling your arm with the head lower than the trunk, and the head supported with the hand around the jaw 2. Deliver 5 back blows between the shoulder blades with the heel of your hand 3. Sandwich the infant between your arms (all the while supporting the neck of the infant). Turn the infant over and deliver 5 chest thrusts using two fingers, just below the nipple line 4. Check the airway. If you see a foreign body, gently 'hook' it out, but avoid blind finger sweeps 5. Repeat as necessary	1. Place the baby on a firm surface (e.g., table). 2. Position the head in a neutral position and attempt up to 5 small gentle breaths (puffs), repositioning the head between breaths. 3. Give 30 compressions 4. Check mouth for foreign objects and remove if seen 5. Reposition head, give 2 small gentle breaths (puffs) 6. Continue checking for objects each CPR 30:2 cycle, until object is dislodged and baby is breathing, or medical help has arrived

DRSABC – CHOKING – ADULT AND CHILD 1-8 YRS

DANGERS	**Ensure safety for self, bystander and casualty**
RESPONSE (AVPU)	If RESPONSIVE use airway manoeuvres If UNRESPONSIVE commence CPR
SEND FOR HELP	**Send/shout for help.** Send bystander to dial 111
AIRWAY	Clear by encouraging to cough or use back blows or abdominal thrusts
BREATHING	Continue airway manoeuvres until casualty is breathing
CIRCULATION	
SPECIFIC CARE	If casualty becomes unconscious commence CPR
GENERAL CARE	

NOTES

CHILDREN UNDER 1 YEAR (BABY): CONSCIOUS CHOKING

Conscious baby with obstructed airway.

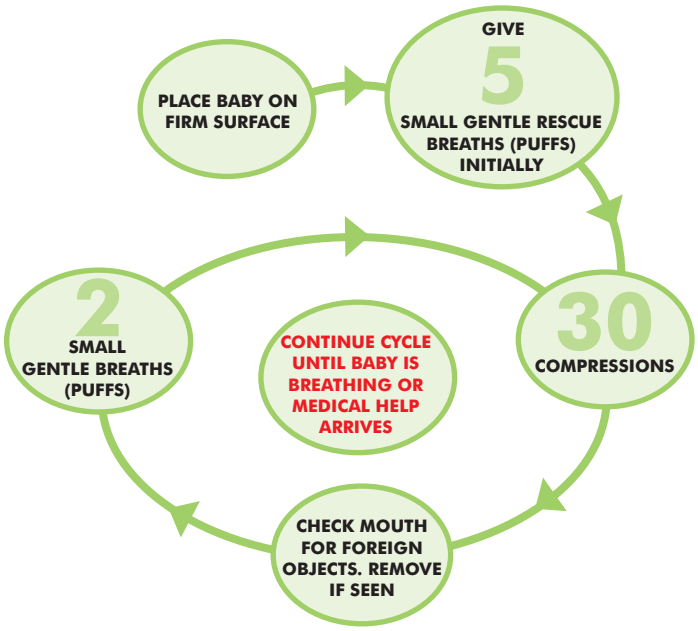
The actions for dealing with choking in an unconscious baby are as follows:

5 back blows

Sandwich turn

5 chest thrusts

CHILDREN UNDER 1 YEAR (BABY): UNCONSCIOUS CHOKING



DRSABC – CHOKING – CHILD UNDER 1 YR (BABY)

DANGERS	**Ensure safety for self, bystanders and casualty**
RESPONSE (AVPU)	If RESPONSIVE use airway manoeuvres If UNRESPONSIVE commence CPR
SEND FOR HELP	**Send/shout for help.** Send bystander to dial 111
AIRWAY	Clear by a combination of back blows and chest thrusts
BREATHING	Continue airway manoeuvres until casualty is breathing
CIRCULATION	
SPECIFIC CARE	If casualty becomes unconscious commence CPR
GENERAL CARE	

If the casualty becomes unconscious, follow the standard sequence for child under 1 year (baby) CPR, checking airway for obstruction each time the airway is opened. Repeat the sequence of airway examination/ attempted rescue breath/chest compressions until the object becomes dislodged or advanced help arrives.

BLEEDING

Identify and assess bleeding

Blood loss may occur either internally or externally.
In internal bleeding there may be no visible blood, and it will be the signs and symptoms of shock that alert the first aider to the loss of blood.

In external blood loss the quantity and colour of blood will vary depending on the type of blood vessel damaged.

Blood Vessel Type	Characteristics of Bleeding
ARTERY	Bright red blood, spurting in response to heart beat
VEIN	Dark red in colour, flows steadily
CAPILLARY	Blood oozes gently

Wounds in areas with a good blood supply will bleed a lot. A large amount of blood can be lost from a very small cut in areas such as the scalp.

The first aider should always expose the wound site to determine the seriousness of the injury.
If the wound is covered by clothing, remove clothing from the affected area to see the wound. If necessary, cut clothing.

Protect yourself from infection by wearing gloves when blood is present. When possible encourage the casualty to apply pressure using their own hand to limit your contact with blood.

If gloves are not available, using plastic bags as makeshift gloves is a good alternative.

Manage external bleeding

- If possible, lay the casualty down, and **rest** the injured area.
- If an arm or leg is injured, **elevate** the affected limb and keep it raised for 5 minutes after bleeding stops.
- **Expose** the wound.
- Place a clean non-fluffy dressing pad over the wound and apply firm **direct pressure** for 10 minutes.
- If there is a foreign object embedded in the wound, apply pressure around the object not directly over it.
- If blood comes through the first dressing, place another pad over the first without removing the original pad.

THINK RED

Rest & Reassure

Elevate & Expose

Dressing & Direct Pressure

Foreign bodies in wounds

Foreign bodies that are clearly on the surface and not sticking to the wound may be removed.

If in doubt leave foreign bodies where they are.

Pad around the object to prevent direct pressure being applied over the object.

Indirect pressure

If bleeding does not stop using direct pressure and elevation, indirect pressure should be used.

- Apply pressure over a pulse point between the injury and the heart, either in the groin or upper arm depending on the injury site.
- Press firmly for up to 10 minutes.
- After 10 minutes release the pressure, wait 10 seconds and if bleeding is still occurring continue indirect pressure for a further 10 minutes.

DRSABC – BLEEDING

DANGERS	Ensure safety for self, bystanders and casualty. Wear gloves
RESPONSE	AVPU
SEND FOR HELP	Consider calling 111
AIRWAY	Check airway
BREATHING	Check breathing
CIRCULATION	Control bleeding, treat for shock
SPECIFIC CARE	Think RED, Rest and Reassure, Elevation, Direct or indirect pressure Dressing
GENERAL CARE	Keep casualty warm and reassure

AMPUTATIONS

1 **DO NOT WASH**

2 

3 

4 

If a body part has been amputated always call an ambulance and tell them that an amputation has occurred.

Manage bleeding using pressure and elevation.

Care for the amputated body part in the following way:

1. Do not wash or clean the amputated part.
2. Place inside two sealed plastic bags.
3. Label the bag with the casualty's name and the date and time of the accident.
4. Wrap the bag in a towel and place in ice.

NOTES

CHEST INJURIES

Chest injuries may be caused by blunt or penetrating objects. Any injury that damages the chest wall will have a direct effect on the casualty's ability to breath.

Manage chest injury

- Cover any sucking chest wounds. Preferably use clear plastic food wrap (or a clean supermarket bag, or plastic sided dressing) taped down to seal the wound.
- If conscious, incline the casualty towards the injured side.
- If unconscious turn the casualty onto the injured side.

Chest injuries

ABDOMINAL INJURIES

Abdominal injuries may be caused by a blunt or penetrating instrument, both of which may result in severe or fatal internal bleeding.

Manage abdominal injury

- Cover any wounds with a dressing.
- Lie the casualty down. Bend the knees if there is a large cross-wise wound.
- Do not touch or try to replace any internal organs that are showing, but cover with clear plastic food wrap or a wet dressing.

CRUSH INJURIES

When a casualty has been trapped under a heavy object for a long period, toxic substances build up in the muscles.

These substances can cause kidney problems if the heavy object is released suddenly.

Manage crush injury

- DRSABC – **Call for medical help**

Tell the medical help/ambulance what you know about the accident and get advice.

A casualty who has been crushed for less than one hour can be released and treated for injuries.

If the casualty has been severely crushed for more than one hour they should not be released until specialized medical support is available to treat the toxic substances and prevent kidney damage.

Crush injuries

NOSE BLEEDS

- Sit the casualty down, leaning forward.
- Advise them to pinch the nose firmly just below the bony part, which will help to stop the bleeding and still allows the casualty to breathe.
- Maintain pinch pressure for 10 minutes.
- Release pressure after 10 minutes. If bleeding is not controlled reapply pressure for a further 10 minutes.
- An ice pack applied to the nose area may be useful.
- When bleeding has stopped don't blow the nose for 4 hours.
- If bleeding continues for more than 30 minutes, seek medical assistance.

Also see *Fractured Nose* in the Head Injuries section.

EAR INJURIES

Wounds to the outer ear may bleed profusely.
Foreign objects or insects may enter the ear.
General management principles:

- Do not try and remove any object that is wedged in the ear canal, get professional help.
- Never use any sharp object to remove any foreign body from the ear as this can cause further injury.
- If bleeding or yellowish fluid is leaking from the ear, consider head injury. Lay person on their side so the effected ear drains onto a dressing.
- If ear ache or ear pain, keep ear warm. Do not administer drops or probe. Seek medical attention.

KNOCKED OUT PERMANENT TEETH

- Pick the tooth up by the crown, not the root.
- If a tooth is dirty, rinse in milk. DO NOT use soap or chemicals, scrub the tooth, or let it dry out.
- It is important to keep the tooth root moist and alive. Place in milk, or saline solution if available. If not available, wrap tooth in cling film or plastic wrap. Otherwise, place the tooth under the lip.
- DO NOT store the tooth in water. DO NOT wrap it in tissue paper or a cloth.

Time is critical. See a dentist as soon as possible, ideally within 30 minutes. However, it is possible to save the tooth even if it has been outside the mouth for an hour or more.

NOTES

EYE INJURIES

The eye is a delicate object which can become badly damaged by foreign bodies and chemicals.

Wear eye protection whenever there is a risk of eye injury.

Identify and assess eye injuries

Depending on the seriousness of the injury and the object causing injury some or all of the following may be present:

- Watering of the eye.
- Redness of the eye.
- Pain.
- Excessive blinking.
- Loss of vision.
- Blood or clear fluid leaking from inside the eye.
- Flattening of the normal round eye shape.

Manage eye injuries

Never attempt to remove a foreign body that is embedded in any part of the eye, or located over the coloured part of the eye (iris) or pupil.

In either of these cases, stabilise any object, cover both eyes with pads and seek hospital treatment.

If the object is on the white part of the eye, moving as the casualty blinks, it can be removed.

Rinse it out with water

Lift it out using a corner of material.

ALWAYS SEEK MEDICAL ADVICE

When chemicals have entered the eye:

- Call an ambulance
- Gently separate the eyelids to open the eye and wash eye with a gentle stream of water until help arrives.

SHOCK

Shock occurs when not enough oxygen-rich blood reaches parts of the body.

Shock may be seen in most serious injuries involving fluid loss such as bleeding, burns or illness involving diarrhoea and vomiting or heart attacks.

Shock is considered life threatening. Call an ambulance.

Identify and assess shock

The signs and symptoms apparent in shock may include the following:

- Irritability, restlessness or anxiety.
- Pale, cold, moist skin.
- Weak, rapid pulse.
- Rapid breathing.
- Feeling sick.
- Feeling faint.
- Unconsciousness may develop.

Manage shock

- Call an ambulance, **Dial III.**
- Where possible, treat the cause of the shock; stop bleeding, cool burns.
- Lie the casualty down and raise the legs if injuries don't prevent this.
- Keep the casualty warm.
- Reassure the casualty.
- Loosen restrictive clothing.
- Do not give food, drink, or cigarettes.
- Monitor vital signs and ABCs.

Most injuries and many illnesses give some degree of shock.

FAINTING

Fainting is brief loss of consciousness caused by a temporary decrease in blood flow to the brain.

Some people faint at the sight of blood or as a reaction to pain or bad news.

A common reason for fainting is standing in one position without moving for a long period of time.

Identity and assess fainting

A casualty who has fainted may feel giddy, unsteady and weak and may:

- Fall to the floor or slump in a chair, and become unconscious.
- Have pale, sweaty skin.
- Have a slow pulse.

Manage fainting

- Lie the casualty down and raise the legs.
- Loosen tight clothing.
- Call an ambulance if the casualty remains unconscious for more than 5 minutes.
- Reassure on recovery.

NOTES

SECONDARY ASSESSMENT

Secondary assessment is an examination of the casualty to help identify injuries or illnesses. It uses the senses of touch, sight, smell, and hearing.

There are 3 parts to the Secondary Assessment. Together these parts will provide information on the casualty's condition that will help you to decide what is wrong with the casualty.

The information you find on the Secondary Assessment should be passed to medical personnel. Where possible it should be recorded in writing.

HISTORY

Question casualty & bystanders

RECHECK VITAL SIGNS

CHECK FOR INJURIES

HISTORY

RECHECK VITAL SIGNS

CHECK FOR INJURIES

HISTORY

- Ask the casualty and/or bystanders what happened.
- Observe evidence at the scene, e.g. pill bottles, chemical containers.

RECHECK VITAL SIGNS AND ACT AS REQUIRED

Check vital signs regularly until ambulance arrives.

Breathing

Check the breathing rate of the casualty by counting breaths taken over one minute. The rate of breathing can be controlled at will, so do not advise the casualty of your check.

Pulse (Secondary Assessment)

If unconscious, check the pulse either in the neck or the wrist. Count the beats over a 30-second period and double the result.

- The normal pulse rate for an adult is 60-80 beats per minute.
- Children's pulses are faster depending on their size.
- A normal infant pulse rate is 120-140 beats per minute.

The vital signs check should be repeated and recorded at 10 minute intervals.

PULSE	
CAROTID PULSE	Felt at the neck, see diagram on previous page
RADIAL PULSE	Felt on the underside of the wrist, below the base of the thumb
BRACHIAL PULSE	Located in the inside of the upper arm half-way between the elbow crease and the armpit

Level of Consciousness – Responsiveness

Determine the casualty's level of consciousness.

LEVELS OF CONSCIOUSNESS	
A	**ALERT** FULLY RESPONSIVE OR MAY BE CONFUSED, OR BECOME DROWSY
V	RESPONDS TO **VOICE**, DROWSY
P	RESPONDS TO **PAIN**, IS UNCONSCIOUS
U	**UNRESPONSIVE**, UNCONSCIOUS

NOTES

CHECK FOR INJURIES

The human body is fairly similar on both sides. This allows us to compare the two sides when inspecting for injury. The body check is carried out head to-toe.

If you find an injury it will be necessary to remove clothing to know the size, type and severity of injury. Do not remove or damage more clothing than necessary.

Ensure the casualty's privacy.

Always ask the casualty's, permission to do a body check and explain what you are doing.

NOTES

MEDICAL CONDITIONS

HEART ATTACK

The heart, like any other muscle in the body, needs a blood supply to provide it with oxygen. A heart attack occurs when there is a reduction in the blood supply to a part of the heart muscle, damaging the heart.

Identify and assess heart attack

The casualty may think they just have indigestion and deny other symptoms. Some or all of the following symptoms will be present:

- Heavy pressure, tightness, crushing point or unusual discomfort in the centre of the chest.
- Pain may spread to the shoulders, neck, jaw, arms or back.
- Sweaty, pale skin.
- Feeling faint.
- Feeling short of breath.
- Rapid pulse.

Manage heart attack

- Encourage the casualty to rest quietly, in a comfortable position.
- **Dial 111** for an ambulance – **URGENTLY**
- Ask the casualty if they are allergic to aspirin. If not, give 1 tablet (300 mg) to chew, or swallow soluble asprin dissolved in a small amount of water.
- Monitor ABCs and vital signs.
- A heart attack may lead to cardiac arrest. Be prepared to perform resuscitation.

HEART ATTACK
Dial 111 for ambulance as soon as possible.

ANGINA

Angina is the pain felt when there is temporarily insufficient blood flow to the heart to meet the heart's needs. Permanent heart muscle damage does not result.

Most angina attacks will be managed by the casualty by rest and medication. If the casualty does not respond to resting and taking their medication consider and treat as a heart attack.

Identify and assess angina

Angina is characterised by:

- Pain in the chest, neck, jaw or arms brought on by effort or excitement.
- Sweaty, pale skin.
- Shortness of breath.

Manage angina

Most people with a history of angina carry medication with them. This medication may be a spray or tablet, which is taken under the tongue.

- Encourage the casualty to rest quietly.
  Help the casualty loosen tight clothing.
- Call an ambulance.
- If the casualty has medicine they should take it.

ANGINA	HEART ATTACK
■ Occurs on effort or excitement ■ May be relieved by rest or medication	■ May occur at rest ■ Not relieved by rest or medication

HEART HEALTH

A healthy lifestyle will promote heart health and reduce the risk of heart disease. Use the table below to determine your risk of heart disease and identify areas where lifestyle modifications may improve your heart health.

Risk Factors	0	1	2	Your Score
CIGARETTE SMOKING	Non-smoker	15 or less daily	Over 15 daily	
BLOOD PRESSURE	Low or normal	Raised or not known	High	
CHOLESTEROL & FAT LEVELS IN BLOOD	4.5 mmol/L	4.6-5.5 mmol/L	Over 5.5 mmol/L	
WEIGHT	Normal	Overweight	Obese	
DIABETES	No diabetes	Family history of diabetes	Diabetic	
EXERCISE	Vigorous, on most days	Vigorous, once or twice weekly	Usually inactive	
BEHAVIOR TYPE & STRESS	Easy going, contented, rarely tense	Often hurried, anxious, intolerant	Hurried, competitive, aggressive	
FAMILY HISTORY	No premature heart disease	Heart disease before age 55		
AGE	Under 40 yrs	40-50 yrs	Over 50 yrs	
		TOTAL POINTS		

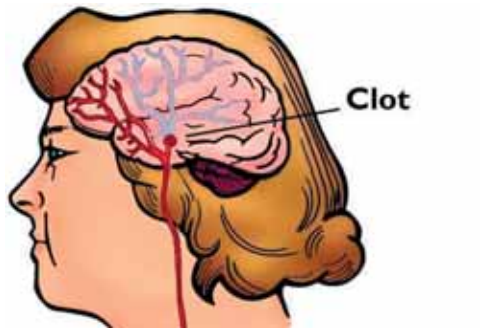
HOW DID YOU SCORE?		
0-2 POINTS	**Low risk**	
3-5 POINTS	**Moderate risk**	**MODIFY LIFESTYLE**
6-9 POINTS	**Excessive risk**	
10 OR MORE	**High risk**	

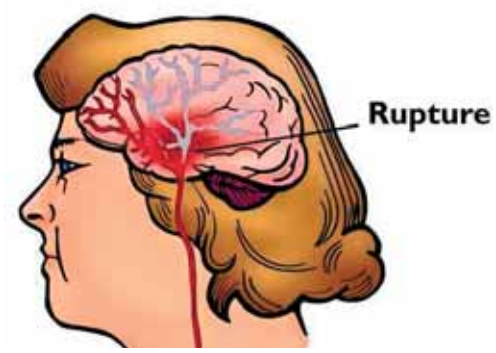
When modifying your lifestyle consideration should firstly be given to stopping smoking, having your blood pressure checked regularly and reducing fat intake in your diet. For a fuller risk assessment, or further advice, see your doctor.

STROKE

A stroke occurs when the blood supply to the brain is impaired by a blood clot or burst blood vessel.

Call for medical help immediately. **DIAL 111 URGENTLY.**





Identify and assess a stroke

The specific symptoms of a stroke will vary depending on the part of the brain affected.

STROKE
Dial 111 for ambulance as soon as possible.

Quick recognition and response makes all the difference

Chances of survival and prospects of recovery from a stroke dramatically increase when victims receive emergency support within three hours of having a stroke.

Therefore, rapid recognition of warning signs and the immediate call of emergency services are crucial.

Think 'FAST'

IS IT A STROKE?
Dial 111 if someone can't

F
Face – SMILE
(is one side droopy?)

A
Arms – RAISE BOTH ARMS
(is one side weak?)

S
Speech – SPEAK A SIMPLE SENTENCE
(slurred? Unable to?)

T
Time – Lost time could be lost brain, get to hospital **FAST**

Manage a stroke

- Dial 111 immediately.
- Place in Recovery Position if unconscious.
- Monitor ABCs, level of consciousness and vital signs.
- Reassure the casualty.

REDUCE RISK OF STROKE

With 8,000 strokes nationwide each year, the incidence of stroke is increasing. To reduce the risk of stroke and get the most out of life, the following seven steps are recommended for all New Zealanders.

7 STEPS TO REDUCING YOUR RISK OF STROKE

1. Get your blood pressure checked and if necessary treated
2. Stop smoking if you do
3. Exercise regularly
4. Limit the amount of alcohol you drink
5. Eat a healthy balanced diet, control your weight and reduce your salt intake
6. Get your cholesterol checked and if necessary treated
7. Find out if you have Atrial Fibrillation (rapid, irregular contraction of the heart)

0800 78 76 53
STROKE FOUNDATION
OF NEW ZEALAND INC
www.stroke.org.nz

DIABETIC EMERGENCY

In diabetes the body is unable to control the blood sugar level. This may result in the blood sugar level being too high (hyperglycaemia) or too low (hypoglycaemia). Hyperglycaemia develops slowly and is unlikely to be a first aid emergency.

Identify and assess low blood sugar

Low blood sugar will result in:

- Pale, cold, sweaty skin.
- The 'shakes'.
- Confusion or aggression.
- Unconsciousness may develop.
- Many diabetes wear Medic Alert bracelets or necklaces or anklets.

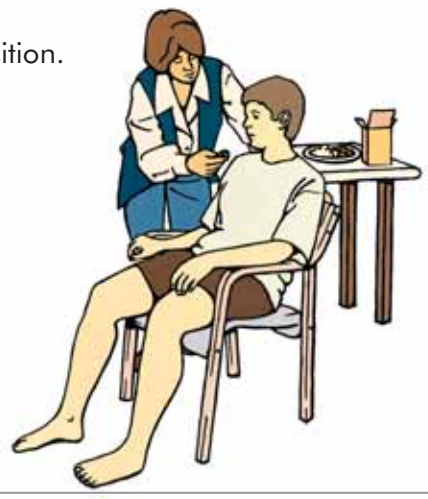
Manage low blood sugar

If conscious:

- Give sugary food: glucose, jelly beans, honey, sugar, or sugary drink.
- Improvement should occur within 5 minutes.

If unconscious:

- Check ABCs.
- Place in Recovery Position.
- Call an ambulance.



SEIZURES

Seizure could be result of:

- Excessive heat
- Head injury
- Pregnancy
- Epilepsy
- Cardiac arrest
- Other medical conditions

Epileptic seizures occur as the result of a sudden, brief electrical discharge taking place in the brain. They can take several different forms. The form that is most well known and most frequent is called **tonic clonic seizures**.

These seizures usually occur in people who have epilepsy, but also occur in young children who have an infection associated with a high temperature.

Identify Epileptic Seizures

In tonic clonic seizures the following pattern is generally seen:

- The person loses consciousness.
- The body stiffens briefly.
- Muscular contractions begin.
- Muscular contractions cease.
- Consciousness is regained.
- The person may feel sleepy or be confused.

During the seizure saliva may appear at the mouth. If the tongue or mouth has been injured the saliva may be bloodstained.

Bladder or bowel control may be lost.

Do not restrain the person, nor put anything in their mouth.

Manage Seizures

- Make the area safe. Protect the person from injury.
- Keep bystanders away. Maintain privacy.
- Check for a Medic Alert bracelet or necklace.
- Do not restrain person, or put anything in the mouth.
- When muscular contractions end, place the person in the recovery position. Ensure the airway is clear.
- Call an ambulance if:
  - The muscular contractions last longer than 5 minutes or more than one seizure occurs.
  - Casualty has head injury.
  - Casualty is pregnant.
  - Other injury has occurred.

Convulsions due to excessive heat

Convulsions in young children often occur due to high temperature during an illness, **(febrile convulsions)** but can occur in adults also.

The management aim is to reduce the high temperature:

- Place in recovery position and if unconscious ensure airway is clear.
- Remove excess clothing.
- Sponge skin with lukewarm water.
- Seek medical advice as hospitalisation may be required.

ASTHMA

An asthma attack occurs when the air passages in the lungs become narrowed. Most asthmatics carry medication with them.

Identify and assess asthma

The casualty may experience:

- Difficulty breathing.
- Wheezing.
- Coughing.
- Difficulty speaking in sentences.

Manage asthma

- Ask the casualty if they have asthma, and where their medication is.
- Help the casualty sit up, leaning forward slightly, resting for support on a table or the back of a chair.
- Assist them to take their medication, often a blue inhaler.
- Reassure the casualty.
- If the attack does not respond to medication **Dial 111** for an ambulance.

HYPERVENTILATION

Hyperventilation, or over-breathing, is when the breathing rate or depth is increased, which can sometimes be triggered by anxiety.

Signs and symptoms include numbness, tingling and spasm of the hands.

Manage hyperventilation

- Reassure the casualty.
- Sit them down and stay with them.
- Encourage them to breath slowly with deep breaths.
- Ask the casualty to breath with you, slowly and deeply.

NOTES

DRSABC – MEDICAL CONDITIONS

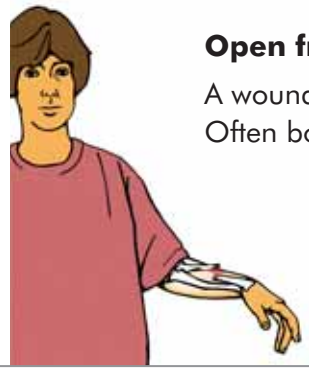
DRSABC	Heart Attack	Angina	Stroke	Diabetes (hypoglycaemia)	Seizure	Infantile convulsion	Asthma
DANGERS	Safety	Safety	Safety	Safety	Safety	Safety	Safety
RESPONSE	AVPU	AVPU	AVPU	AVPU	AVPU	AVPU	AVPU
SEND FOR HELP	Dial 111 urgently	Dial 111 urgently	Dial 111 urgently	Consider 111	Consider 111	Consider 111	Consider 111
AIRWAY	Check	Check	Check	Check	Check	Check	Check
BREATHING	Check Be prepared to do CPR	Check	Check	Check	Check	Check	Check
CIRCULATION	Check	Check	Check	Check	Check	Check	Check
SPECIFIC CARE	Aspirin	Nitrolingual spray	Recovery position if unconscious	Give sugar / carbohydrate if conscious	Protect from injury	Cool casualty	Position as most comfortable for breathing. Assist with medications
GENERAL CARE	Rest and reassure	Rest and reassure	Rest and reassure	Stay with casualty until recovered	Stay with casualty until recovered	Keep casualty cool	Reassure

NOTES

MUSCULOSKELETAL INJURIES

FRACTURES

A fracture describes a break or crack in the bone.
Different types of fractures can occur:

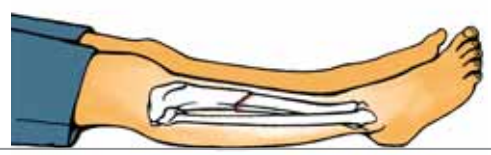


Open fracture

A wound is present at the fracture site.
Often bone will come out through the skin.

Closed fracture

A bone is broken but the skin is not broken. In children, whose bones are more flexible, the bone may not break completely, it may just bend or splinter on one side of the bone.



Complicated fracture

The broken bone damages neighbouring organs, nerves or blood vessels, e.g. ribs damage the lung.

Identify and assess fractures

A fracture may be indicated by:

- Pain at the injury site.
- Swelling and tenderness.
- Deformity of the injured area.
- Inability to use the injured area normally.
- Blood loss, internal or external, resulting in shock.

Manage fractures

- Treat bleeding with **pressure** around the wound if possible. Check every 10 minutes for colour, warmth and swelling.
- Cover bone ends with clean non-fluffy material.
- Support and **stabilise** the injured area.
  Do not splint fractures unless ambulance assistance is delayed or you must move the casualty.
- Check and treat for shock.
- Keep warm and reassure.
- **Dial 111** for ambulance except for minor fractures (e.g. fractured fingers).

***Fractured nose – please see Head Injury Section.**

APPLY PRESSURE

IMMOBILISE AREA

Apply pressure to bleeding

Support & Immobilise the injured area

DISLOCATIONS

A dislocation occurs where bones meet at joints. In a dislocation the bones are moved from their normal position. Common sites for dislocations are the shoulder, knee, elbow and fingers.

If you are not sure whether a fracture or dislocation has occurred, treat the injury as a fracture.

Identify and assess dislocations

A dislocation may be indicated by:

- Severe pain.
- Deformity of the affected joint.
- Swelling.
- Loss of movement.

Manage dislocations

- Immobilise and support the area in its injured position.
- Apply a cold pack to reduce swelling.
- Call an ambulance except for minor dislocations e.g. fingers.
- Do not try to reposition into original position.

Do not try to reposition the bones in their original position.

SOFT TISSUE INJURIES/BRUISING

The muscles, ligaments, tendons and skin of the body are collectively known as soft tissue. Soft tissues are able to be stretched slightly, but they can be injured by over-stretching or tearing.

Identify and assess soft tissue injuries

Soft tissue injuries (sprains and strains) may cause:

- Pain.
- Swelling and bruising.
- Decreased ability to perform normal movement.
- Skin discolouration.

Manage soft tissue injuries – RICE treatment

- Stop the activity when injury occurs.
- **Rest** the area for 48 hours.
- Apply an **Ice** pack wrapped in a towel, for 20 minutes at 3-4 hour intervals.
- Apply a firm **Compression** bandage to the area between ice applications.
- **Elevate** the area.
- **Diagnosis** if the injury does not improve within 48 hours, obtain medical advice.

REST

ICE

COMPRESSION

ELEVATION

DIAGNOSIS

Ice can burn. Never apply ice directly to the skin; always wrap the ice in material. Where available apply oil to the skin before applying an ice pack.

DRSABC – FRACTURES AND SOFT TISSUE INJURIES

DANGERS	Ensure safety for self, bystanders and casualty
RESPONSE	Check for response using AVPU
SEND	Send for help, Dial 111 for severe fractures
AIRWAY	Check airway clear
BREATHING	Check for breathing
CIRCULATION	Treat for shock
SPECIFIC CARE	Stabilise fractures Apply "RICE" for sprains and strains
GENERAL CARE	Keep casualty warm Reassure

NOTES

SPINAL INJURIES

The bones of the spine protect the delicate spinal cord which lies within. The spinal cord is the nerve link from the brain to the body. Spinal injuries can damage the spinal cord permanently.

Identify and assess spinal injuries

Spinal injuries should be suspected when the casualty has:

- Fallen from a height.
- Experienced direct force to the head or neck.
- Suffered a head injury.
- Fallen awkwardly.
- Experienced a deceleration accident, e.g. a head-on motor vehicle accident.
- Dived into shallow water.

Apart from a careful examination of the history, spinal injury should also be suspected when the casualty experiences:

- Loss of or abnormal sensation, e.g. pins and needles in limbs.
- Loss of or abnormal movement.
- Pain in the spinal area.
- Breathing changes, changes in pain.

Manage spinal injuries

Where possible, casualties with suspected spinal injuries should be left in the position they are found in, if conscious. It may be necessary to move a casualty in the following circumstances:

- They are in **real and immediate** danger.
- They are unconscious or become unconscious.
- They require CPR.

Support the head and neck to keep in position.

Keep the spine in line.

DRSABC – SPINAL INJURIES

DANGERS	Ensure safety for self, bystanders and casualty
RESPONSE	Check using AVPU
SEND FOR HELP	Send, Shout for help Dial 111
AIRWAY	Check airway
BREATHING	Check breathing
CIRCULATION	Check
SPECIFIC CARE	If conscious keep still until to ambulance arrives If unconscious roll on to side supporting head
GENERAL CARE	Reassure, keep warm

NOTES

HEAD INJURIES

The brain is a delicate organ which lies in a sac of fluid within the skull for protection. The skull acts as a rigid container, allowing little room for the brain to move or swell.

CONCUSSION

Concussion is 'brain shake'. It occurs when there is a blow to the head, and is a frequent sporting injury.

Identify and assess concussion

Concussion may result in:

- Unconsciousness, often only briefly.
- Memory loss of the events leading to and during the injury.
- Nausea and vomiting.
- Dizziness.
- Headache.
- Blurred vision.
- Seizures may also occur (see seizures section).

Manage concussion

- If the casualty is unconscious, roll casualty onto their side supporting their head.
- Call an ambulance, **Dial 111** if you suspect neck or spinal injuries or the casualty does not regain consciousness.
- Get assessment by medical personnel.

Anyone who has had a head injury should be assessed by medical personnel.

BRAIN COMPRESSION

Pressure on the brain can result from bleeding or swelling of the brain. This is known as brain compression.

Identify and assess compression

The casualty's vital signs will show:

- Unconsciousness with deteriorating level of consciousness (see responsiveness section).
- Pulse may initially be rapid, but then becomes slower.
- Noisy slow breathing.
- Skin may become red, flushed and dry.
- Bleeding from the ear or nose may be present.

Manage compression

- Call an ambulance, **Dial 111**.
- If the casualty is unconscious, roll casualty onto their side supporting their head.
- Monitor ABCs and vital signs.

DRSABC – HEAD INJURIES

DANGERS	Ensure safety for self, bystanders and casualty
RESPONSE	Check using AVPU
SEND FOR HELP	Send, Shout for help Dial 111
AIRWAY	Check airway
BREATHING	Check breathing
CIRCULATION	Treat Bleeding
SPECIFIC CARE	If condition deteriorates, **Dial 111** urgently Consider spinal injury Medical assessment is required for a casualty that has been unconscious
GENERAL CARE	Rest, reassure, keep warm

FRACTURED NOSE

If you believe the casualty has a fractured nose they need to be referred to medical help.

The following need to be considered:

- The airway may be obstructed.
- Control of bleeding.
- The casualty may suffer concussion.

If the casualty is conscious encourage them to tilt the head forwards and breath through the mouth.

RECOVERY POSITION FOR SUSPECTED SPINAL INJURY

If spinal injury is suspected roll the casualty onto their side, supporting their head.

1 One person – recovery position

2 Two person – recovery position

3 Logroll – recovery position

BURNS & SCALDS

Burns are generally caused by heat, but chemicals, electricity, and even extremely cold substances such as ice, can cause burns. In serious burns there may be no pain because nerve endings have been damaged.

Identify and assess burns and scalds

To decide how serious a burn is, look at the following:

- **S**ize.
- **C**ause.
- **A**ge of casualty.
- **L**ocation.
- **D**epth.
- Burns to the head, neck, eyes, hands, feet, over a joint or genital area should always be seen by medical personnel.
- Burns in children under 5 years of age and the elderly should always be seen by medical personnel.
- A burn larger than the size of the casualty's palm should be seen by medical personnel.
- Where smoke or fumes have been inhaled the casualty's airways may be injured; an ambulance is required immediately.
- **Chemical and electrical burns** require ambulance assistance.
- **Electrical** burns may not look big, but the underlying tissue is often damaged and heart rhythms affected. The wounds may not be easily seen. Check for 'entry' and 'exit' wounds and dress.
- **Flash** burn - treat as any other burn.
- **Chemical** burn - Ensure personal safety when dealing with chemical/corrosive materials. Wear personal protective gear.
- Read chemical container for emergency care instructions.

Cold water is the best initial first aid for burns and scalds.

COOL

CLEAR

COVER

Manage burns and scalds

- **Cool** the burned area with cool running water for at least 20 minutes, for chemical burns up to an hour (or more if container says). Keep the casualty warm whilst cooling the burn.
- **Clear** the area of anything that may keep burning: jewellery, clothing that isn't sticking (cut around stuck clothing). In chemical burns it is important to remove clothing contaminated with chemicals.
- **Cover** the burned area with clean, non-fluffy material. Cling film is ideal.

In serious burns, shock will be present. **Dial 111** for ambulance for all serious and electrical burns.

Monitor responsiveness and treat shock.

(Ref:ANZBA)

DRSABC – BURNS & SCALDS

DANGERS	Ensure safety from burning material, hot liquids or steam, chemicals, electricity, smoke, sun etc, for self, bystanders and casualty
RESPONSE	Check for response using AVPU
SEND	Send, Shout for help Dial 111
AIRWAY	Check airway, consider damage to nose and mouth
BREATHING	Check for breathing Ensure fresh air
CIRCULATION	Treat for shock Treat wounds
SPECIFIC CARE	Cool heat burns for 20 mins minimum Flush chemicals for up to 1hour
GENERAL CARE	Keep casualty warm and protect from cold Reassure

NOTES

POISONS

A poison is a substance that causes harm when it enters the body.

Poisons can enter the body through the skin by absorption or injection, the lungs or through the mouth.

WHAT?

WHEN?

HOW MUCH?






Urgent advice always phone 111. Non-urgent advice phone 0800 POISON or 0800 764 766.

DO NOT make the casualty vomit, unless instructed to by medical personnel.

Identify and assess poisoning

The signs and symptoms of poisoning will vary according to the type of poison and how the poison has entered the body.

Look for:

- Vomiting.
- Burned lips and mouth.
- Skin rash or swelling.
- Breathing difficulties.
- Altered level of consciousness.
- Seizures.

Find out **what**, **when** and **how much** poison has been taken. Always save any remaining poison, poison container or vomit for medical personnel to check.

Manage poisoning

- Remove the casualty from the poison or the poison from the casualty. Ensure your own personal safety.
- If life threatening, **Dial 111** for an ambulance. (e.g. bleeding, unconsciousness, breathing difficulties).
- If not in immediate danger, call **0800 POISONS** for advice from Poisons Centre. Administer treatment advice.
- If the casualty has burns around the mouth, use mouth to nose technique if resuscitation is required.
- If the poison has entered through the lungs or been swallowed, keep your head clear of the casualty when they exhale, during rescue breathing.
- Check the poison container for type of poison and any instructions on managing poisoning. Keep for medical personnel.
- DO NOT give casualty water or milk unless a corrosive agent (such as acid or alkaline) has been taken and unless instructed by a Poisons Centre Advisor.
- DO NOT induce vomiting.

THE NATIONAL POISONS CENTRE, phone 0800 764 766 or 0800 POISON (24 hours), or for general information their website is www.toxinz.com (Poison Centre database).

	Inhaled	Ingested	Absorbed	Injected
DANGERS	Ensure safety	Ensure safety	Ensure safety	Ensure safety
RESPONSE	Check using AVPU	Check using AVPU	Check using AVPU	Check using AVPU
SEND FOR HELP	Consider 111	Consider 111	Consider 111 0800 Poisons	Consider 111 0800 Poisons
AIRWAY	Check	Check	Check	Check
BREATHING	Check	Check	Check	Check
CIRCULATION	Check	Check	Check	Check
SPECIFIC CARE	Remove casualty to fresh air	Do not make casualty vomit. Give nil by mouth	Wash area, seek advice	Wash area, seek advice
GENERAL CARE	Reassure	Reassure	Reassure	Reassure

STINGS

- Get away from the bees/wasps.
- Scrape off the bee sting, or remove as soon as possible, using a ruler or piece of paper to limit venom injection. Do not pull out.
- Wash the area well.
- Rest and reassure the casualty.
- Apply ice pack/cold compress to site for swelling and pain relief.
- Monitor ABCs and give CPR as necessary.
- If allergic, **Dial 111** for ambulance.

Any stings to the eye, mouth, throat, face, neck, or genitalia should be medically assessed.

SEVERE ALLERGIC REACTION

Anaphylactic shock is a severe allergic reaction to a substance that affects the whole body. It is **a medical emergency** and can occur within minutes. Common allergies are to insect stings, drugs and foods.

Identify and assess severe allergic reaction

Generally the more rapid the onset of symptoms after exposure to the allergen, the more serious the reaction will be.

AIRWAYS

BREATHING

CIRCULATION

Severe allergic reaction may result in:

- Difficulty breathing and wheezing.
- Swelling of neck and face.
- Rash or hives.
- Nausea and vomiting.
- Collapse.
- Medication may be carried.
- A Medic Alert bracelet or necklace may be worn.

Call an ambulance and the nearest doctor.

Manage severe allergic reaction

- Monitor ABCs and vital signs.
- Call an ambulance, **Dial 111**, and the nearest doctor.
- If unconscious place in Recovery Position.
- Assist with administration of medication. This medication is carried by many people who know they are likely to have a severe allergic reaction.
- Apply ice packs to swelling.

DRSABC – SEVERE ALLERGIC REACTION

DANGERS	Ensure safety for self, bystanders and casualty
RESPONSE	Check using AVPU
SEND	Send, Shout for help Bystanders to call 111
AIRWAY	Check
BREATHING	If breathing difficult consider sitting up
CIRCULATION	If shocked treat for shock
SPECIFIC CARE	Assist casualty with their medication
GENERAL CARE	Reassure, keep warm

ENVIRONMENTAL CONDITIONS

The human body works best at a temperature of about 37 °C. The outer parts can get much colder and still function effectively. If the core body area containing vital organs lies outside this temperature it ceases to function effectively.

HEAT EXHAUSTION

Heat exhaustion occurs due to excessive loss of body fluid and body salts.

Identify and assess heat exhaustion

Heat exhaustion is seen as:

- Pale, sweaty skin.
- Headache.
- Dizziness.
- Rapid, weak pulse.
- Rapid breathing.
- Feeling sick.
- Muscle cramps.
- Body temperature normal or near normal.
- Tired and restless.

Manage heat exhaustion

- If unconscious monitor ABCs, place in Recovery Position, call an ambulance.
- Rest in a cool place, lying down.
- Remove excess clothing.
- If conscious give plenty of cool plain water to sip.
- Treat for shock.

HEAT STROKE

Heat stroke (or sun stroke) occurs when the temperature-regulating centre in the brain overheats and fails.

Identify and assess heat stroke

- Headache.
- Hot, flushed, dry skin.
- Full and bounding pulse.
- Falling level of consciousness.
- Unconsciousness may develop.
- Body temperature above normal.
- Seizures and blurred vision.

Manage heat stroke

- **Dial 111** for an ambulance.
- Rest in a cool place in recovery position if unconscious.
- Cool the person by spraying with water or use ice packs.
- Keep cooling, use a fan.

HEAT STROKE
Dial 111 for ambulance as soon as possible.

DRSABC – HYPERTHERMIA

DANGERS	Ensure safety for self, bystanders and casualty
RESPONSE	Check using AVPU
SEND FOR HELP	**Send/shout for help.** Bystander to call 111
AIRWAY	Check
BREATHING	Check
CIRCULATION	Treat for shock
SPECIFIC CARE	Move to cool environment Remove excess clothing Cool sips of water For Heat Stroke spray with water or use ice packs
GENERAL CARE	Reassure, monitor temperature.

NOTES

HYPOTHERMIA

Hypothermia occurs if the core body temperature falls below 35°C. Hypothermia most often occurs outdoors, where wet, cold and wind combine to create a cooling effect. It can also occur in poorly heated homes, and is more likely to affect the elderly and infants.

Identify and assess hypothermia

Early warning signs of hypothermia are:

- Feeling cold and shivering.
- Tiredness.
- Slurred speech.
- Loss of coordination, stumbling, clumsiness.
- Changes in behaviour such as anxiety, irritability, irrational behaviour.

Later signs indicating a serious conditions are:

- Shivering stops.
- Unconsciousness.

Normal body temperature

Intense shivering

Irritability/ irrational behaviour

Unconsciousness

If hypothermia is not treated death will occur

ACT QUICKLY

ACT EARLY

Hypothermia can progress quickly with as little as 30 minutes between the initial symptoms and unconsciousness.

Manage hypothermia

Management of hypothermia focuses on preventing further heat loss and gentle rewarming.

- Stop and seek shelter.
- Remove wet clothes, and replace with dry warm clothes.
- Put on a woollen hat.
- Give warm sweet drinks if conscious.
- Keep the casualty lying down.
- Rewarm by placing the casualty in a (preferably) pre-warmed sleeping bag or blankets, and provide warmth.
- If the casualty is unconscious place them in the recovery position.

DRSABC – HYPOTHERMIA

DANGERS	Ensure safety for self, bystanders and casualty
RESPONSE	Check using AVPU
SEND FOR HELP	**Send/shout for help.** Consider calling 111
AIRWAY	Check
BREATHING	Check
CIRCULATION	Check
SPECIFIC CARE	Move to shelter and warmth Remove wet clothing Cover, insulate including head
GENERAL CARE	Reassure, keep warm

CASUALTY REPORTING

While you wait for emergency services to arrive, write down the following information about the casualty:

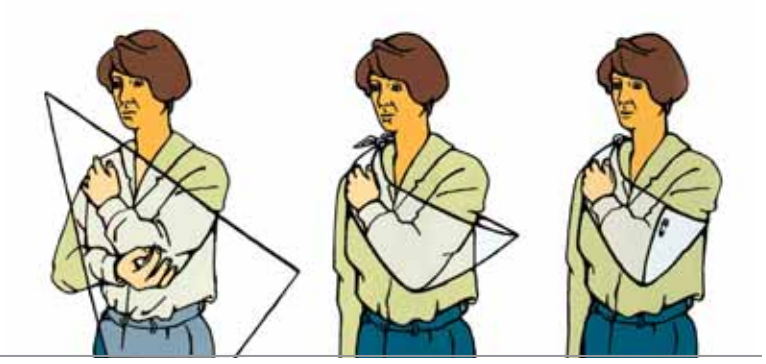
- Casualty's name, address and contact number.
- Age: this is important, especially if the casualty is a young child or elderly person.
- Gender.
- What happened, when and how it happened, past medical history, medications.
- Injuries.
- Observations, vital signs.
- Treatment given.

NOTES

APPLYING SLINGS

Reef knot

Arm sling



Elevation sling

NZ RED CROSS FIRST AID KITS

Arm yourself for a potential emergency with an official Red Cross First Aid Kit.
These kits are durable, showerproof, light and are suitable for all purposes.

Compact portable First Aid kit

Order Code - 4409 A

Large portable First Aid kit

Order Code - 35352 A

Large portable First Aid kit with hazard triangle & torch - for vehicles

Order Code - 35412 A

2 litre First Aid kit

(235mm L x 175mm W x 80mm D)

Order Code - 35418 A

5 litre medium First Aid kit

(265mm L x 240mm W x 120mm D)

Order Code - 35417 A

7 litre large First Aid kit

(350mm L x 235mm W x 120mm D)

Order Code - 35416 A

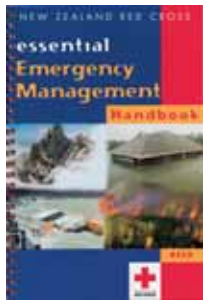
Refills available for all kits

For First Aid Kits and Refills Call 0800 REDCROSS (0800 733 276)

SURVIVAL KIT ITEMS

Also see the "Emergency Survival Items" list on the inside back cover of the yellow pages.

ESSENTIAL EMERGENCY MANAGEMENT HANDBOOK



Plans for a disaster start here!

New Zealand is vulnerable to floods, earthquakes, storms and other emergencies. Disaster can strike any community at any time, and the results can be devastating. However, there are steps you can take to prepare for and manage the effects of a disaster in your home. The **Essential Emergency Management Handbook** clearly explains the steps, skills and supplies that will prepare you and increase your ability to cope with a disaster. **Call 0800 REDCROSS (0800 733 276)** to find out more. To follow are some helpful hints to start off your preparations for a disaster.

SURVIVAL KIT

Every home should have a survival kit.
A survival kit includes essential household items for 72 hours of independent living in an emergency situation.

SURVIVAL KIT CONTENTS

- First Aid Kit, including paracetamol for fever.
- Personal Medicines
- Canned or dried food sufficient for at least 3 days to be replaced on _____ (every 12 months)
- Bottled water to be replaced on _____ (every 6 months)
- Candles
- Can opener
- Spoons
- Torch
- Extra batteries
- Plastic rubbish bags
- Waterproof matches
- Toilet paper & bucket
- Blankets
- Battery powered AM/FM transistor radio
- BBQ or other means of cooking

Useful extras:

- Warm clothing
- Fire extinguisher
- Cans of pet food
- Important documents e.g. insurance policies, passports

DISASTER PREPAREDNESS TIPS

When disaster strikes you may be on your own for at least the first three days.

Stop... Think... Act.

Turn on your radio for advice and information. Know who to contact in your community if there is a disaster.
Do not use your telephone, unless you need immediate help.

In a flood

When floodwaters threaten:

- Disconnect electrical appliances
- Raise or remove valuables, weed killers and chemicals
- If you have to evacuate, turn off electricity & gas at mains, take emergency kit
- Avoid flooded areas, and listen to radio for flash flood warnings.
- Do not drink floodwater

In an eruption

- Stay indoors with pets
- Close doors and windows
- Save water at an early stage
- Keep gutters and roof clear of ash

If you have to go outside:

- Wear substantial clothing and cover your head
- Carry a torch
- Breathe through a cloth or mask

In a storm or cyclone

- Stay indoors
- Close curtains
- Partially open a window on sheltered side of the house to help save your roof
- Stay away from doors and windows
- Do not go driving unless absolutely necessary
- Tape across large windows.

Read the Civil Defence guidelines "Be Prepared for Disasters" in the back of the phone book.

STOP

THINK

ACT

**www.civildefence.govt.nz
Select "Be Prepared"
then select "What to do"**

In an earthquake

- Move no more than a few steps to safe place, drop, cover and hold head with your hands.
- Stay indoors – do not run outside!

When shaking stops:

- Check yourself and those around you
- Treat injuries
- Turn off heaters and put out fires
- Turn off water, electricity, gas and heating at the mains
- Evacuate if fires cannot be controlled
- Check your neighbours
- Keep alert and prepared – aftershocks may happen.

In a tsunami warning

- Move inland to high ground
- Stay away from streams and rivers
- Never go to the coast - Stay at least one kilometre inland, or 35 metres above the sea level, especially if you are near the coast and there is a strong earthquake

If you have to evacuate

Take with you:

- Essential medicines, toilet items and baby needs
- Important documents (identification, insurance, photos)
- Transistor radio and torch (with batteries)
- Emergency bottled water
- Extra clothing and footwear.

Before leaving:

- Consider your pets and animals
- Turn off water, electricity, gas and heating at the mains
- Lock your property

When you have reached safety:

- Listen to your radio for information and follow civil defence instructions.

PREPARING FOR A FLU PANDEMIC

- Have a plan (who could help with food and supplies, telephone numbers of people who live nearby, as well as your Dr's)
- Have an emergency supplies kit (Food and drink for at least a week, paracetamol, masks, tissue and toilet paper, plus plastic bags for disposal and personal medications) – see Survival Kit Items
- Hygiene, keeping clean (Flu jabs, hand washing, cover coughs and sneezes)
- Continuity planning for the self employed.

More information an influenza and planning for an influenza pandemic is available on: www.moh.govt.nz/pandemicinfluenza or you can call 0800 286 358

TRAINING EMERGENCY CARE FOR FIRST AIDERS

New Zealand Red Cross is a leading provider of First Aid Training in your area.

Call 0800 Red Cross (0800 733 276) for a course near you.

More information on NZ Red Cross Training Courses www.redcross.org.nz

NOTES

HEALTHLINE – DIAL (0800) 611 116

Healthline is a free 24-hour telephone health advice service funded by the Ministry of Health. It's available for all New Zealanders, from the newborn to the elderly, from either a landline or cell phone.

Healthline registered nurses assess a person's condition and health needs and recommend the best course of action and a time-frame in which to take action. They can also provide general health information and location of services.

In an emergency then you should always **Dial 111.**

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For further information about New Zealand Red Cross Training Courses call 0800 REDCROSS (733 276)

Information is also available from our website: www.redcross.org.nz