

# Provide CPR



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**First Aid Oz**



# Introduction



In first aid our aim is to look after and treat the casualty until further assistance arrives (e.g. Ambulance). We are usually able to devote all our resources to that one casualty. When someone is seriously injured or sick it is advisable to always call the Ambulance and bring the Ambulance to the casualty not to take the casualty to the Ambulance or Medical Care. If in doubt you should phone the Ambulance and follow their advice.



# Introduction



## Characteristics of a good first aider

1. **Responsibility** – deals with whole situation
2. **Knowledge**- knows difference between life and death, partial and permanent disability, performs skills accordingly
3. **Communication** – able to call for help and establish open lines with victim and other people
4. **Composure** – has a lot of common sense and able to perform under a lot of pressure





# Assess the situation

Identifying assess and minimising hazards on the situation that may pose a risk of injury or illness to self or to others.

## How do we do this?





# Assess the situation

The aim is to:

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





# Assess the situation

## Identify Hazards in the situation

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



# Assess the situation



## Emergency first aid

### Emergency Action Plan

Your Action Plan should include the following:

1. Quickly assess the situation.
2. Ensure safety for yourself and the casualty. Where there is danger, remove the cause of danger from the casualty or the casualty from the cause, without putting yourself in danger.
3. Decide what you must do first, following the priority given under the **DRSABCD** of First Aid.



# Assess the situation



## Emergency first aid

### Emergency Action Plan

4. Move the casualty as little as possible. The casualty should be moved with care only if:
  - in danger from fire, road traffic, hot road surfaces, electric current, drowning etc, providing it is safe to do so.
  - it is necessary to establish and maintain a clear airway or perform CPR
5. Reassure the casualty.
6. Let the conscious casualty rest in the position he finds most comfortable.



# Assess the situation



## How to call an ambulance

**Dial “000”** (triple zero) in an emergency (if unsuccessful trying 000 on a mobile then try 112)

**Ask for ambulance.**

**Give the location** of where the ambulance has to go (that is, state, district or suburb, street, road, address). give a cross-street reference, building or landmark.

**Give the phone number** you are calling from and your name.

**Explain exactly** what has happened.

**Possible number of casualties** (people hurt or sick).

How **old the casualty** is.

If the casualty is **conscious/ breathing**.

**DO NOT hang up** until the operator tells you to.;



# Legal Liability



Significant legislation occurred in NSW in 2002 with the Civil Liability Act – this Act uses the term ‘**good Samaritan**’ which protects a person who assists another in a first aid setting from potential legal complications.

**Duty of Care...** If you act in a paid or voluntary employment as a First Aid Officer, you have a duty to provide first aid services to those in your care



# The Chain Of Survival



**1st Link**  
Early Access

**2nd Link**  
Early CPR

**3rd Link**  
Early  
Defibrillation

**4th Link**  
Early Advanced  
Cardiac Life  
Support



# First Aid Hygiene



## Before Treatment

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

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



# First Aid Hygiene



## During Treatment

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



# First Aid Hygiene

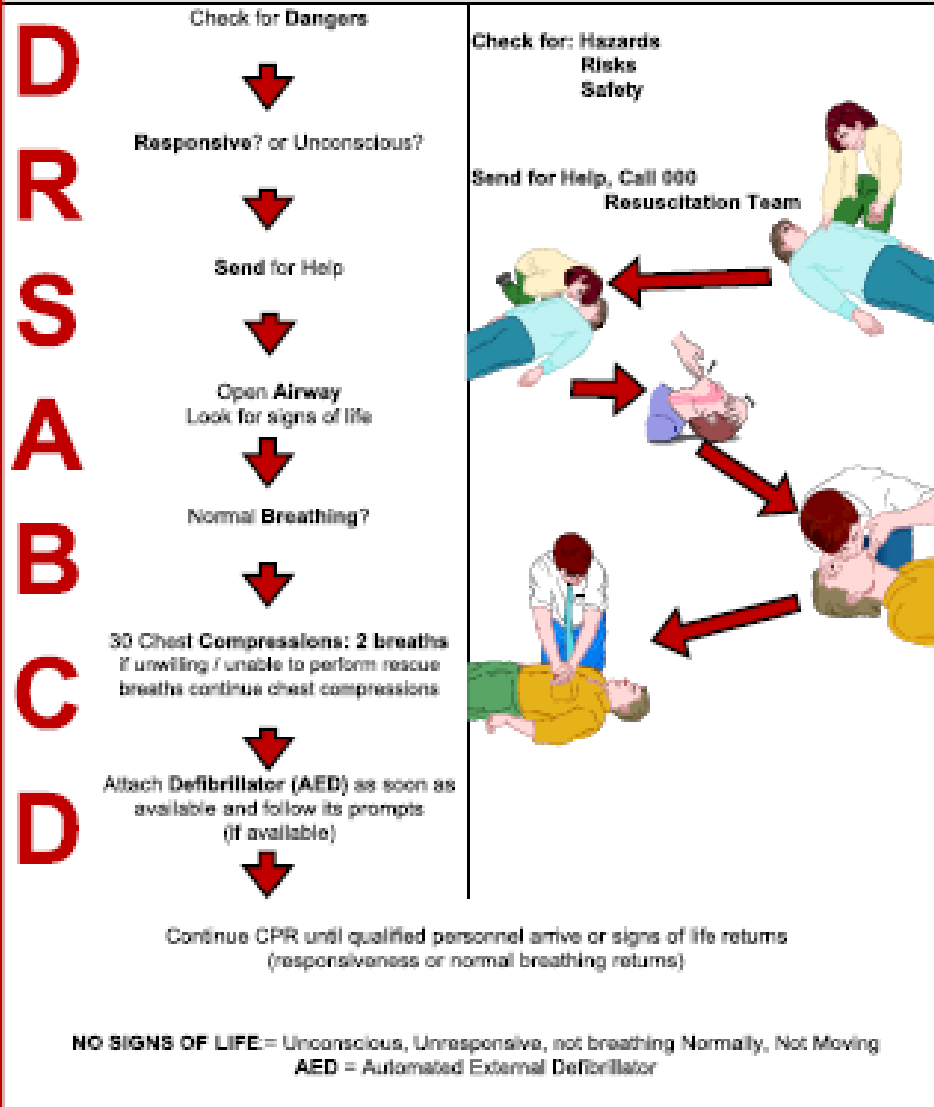


## After Treatment

- Wash hands and dispose of gloves.
- Clean up both casualty and yourself.
- Clean up the immediate vicinity.
- Dispose of dressings, bandages, gloves and soiled clothing correctly by burning.
- Wash hands with soap and water even if gloves were used.



# Basic Life Support Flow chart



# CPR



When a casualty's heart stops beating, this is known as cardiac arrest and the required first aid management is effective and immediate CPR. Some of the causes of cardiac arrest include heart attack, poisoning, electrocution and prolonged respiratory arrest.

**RESCUE + COMPRESSIONS = CPR  
BREATHS**

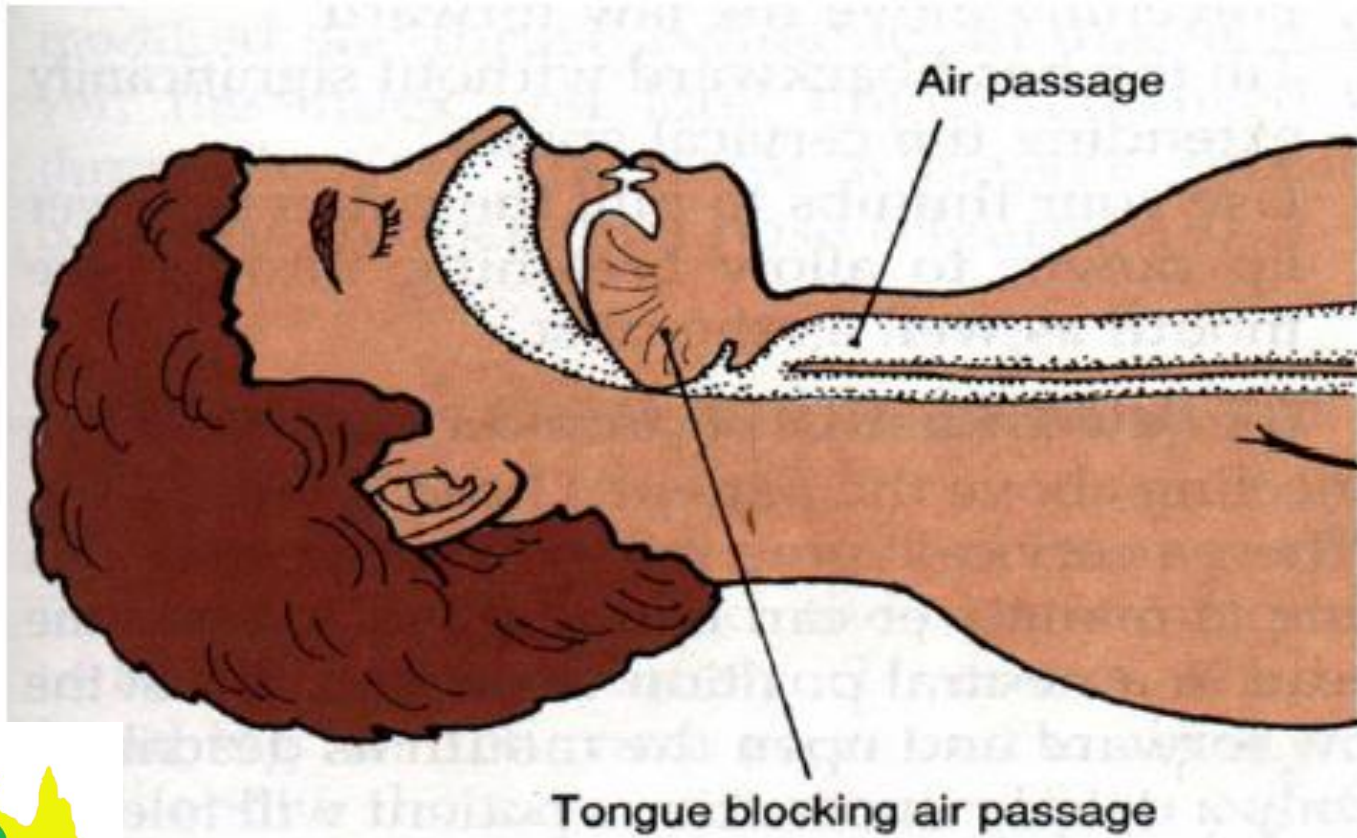




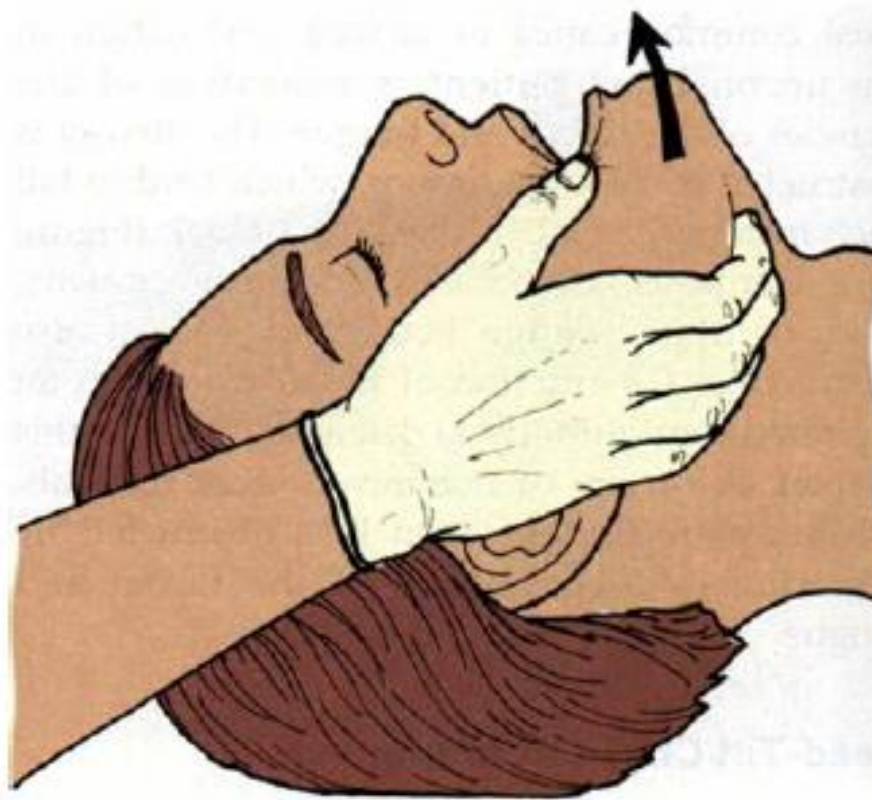
# Emergency First Aid



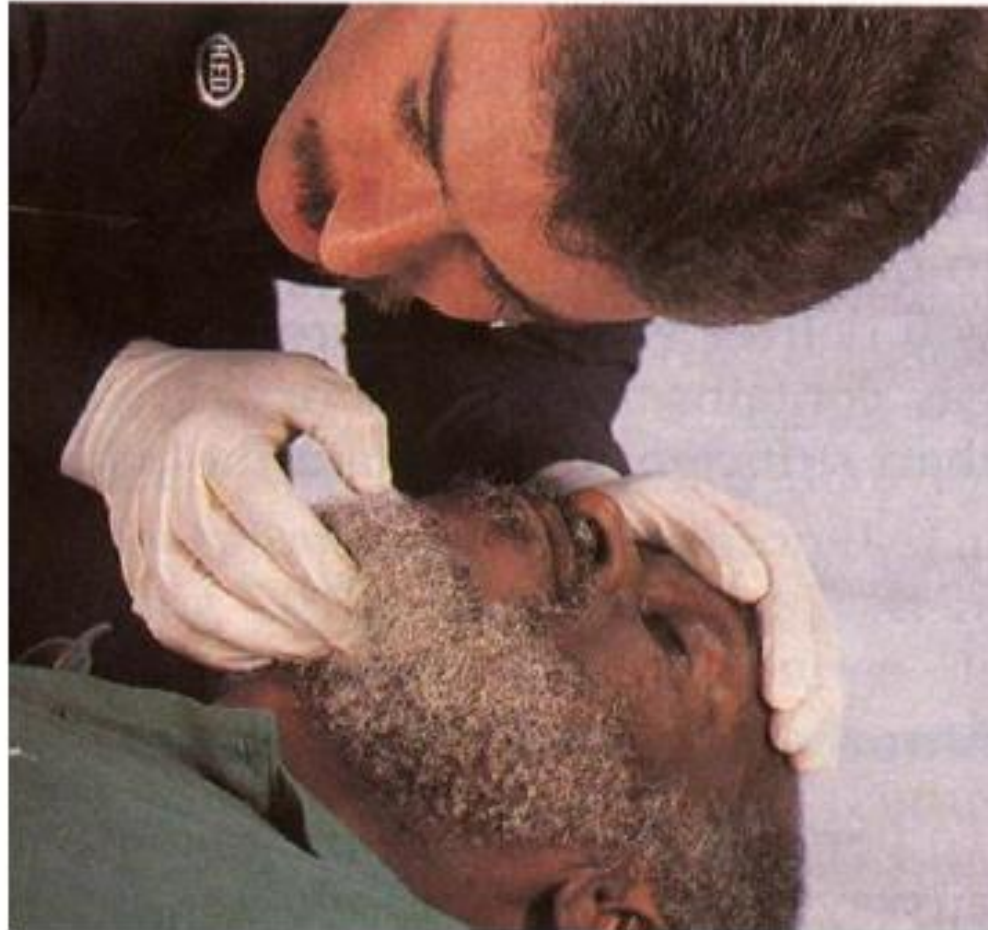
# Opening the Airway



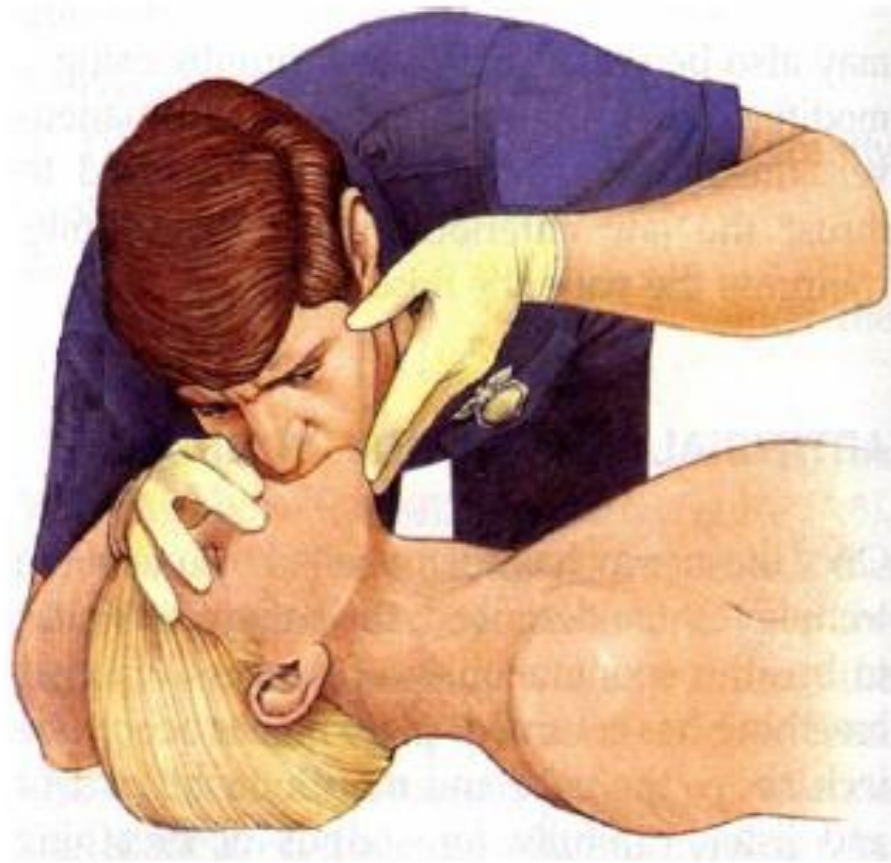
# Opening the Airway



# Look, Listen, Feel



# Mouth to Mouth Ventilation



# Mouth to Nose Ventilation

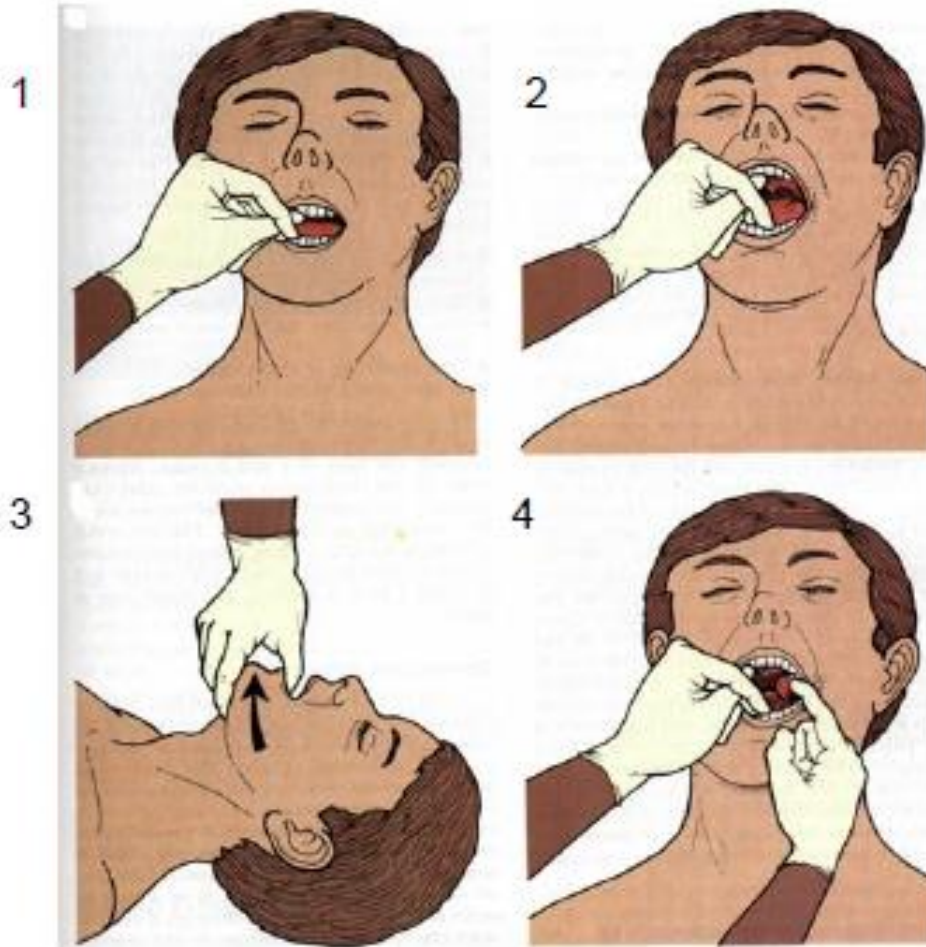




## **Foreign Body Airway Obstruction**



# Foreign Body Airway Obstruction



# Artificial Circulation in Adults



**A**

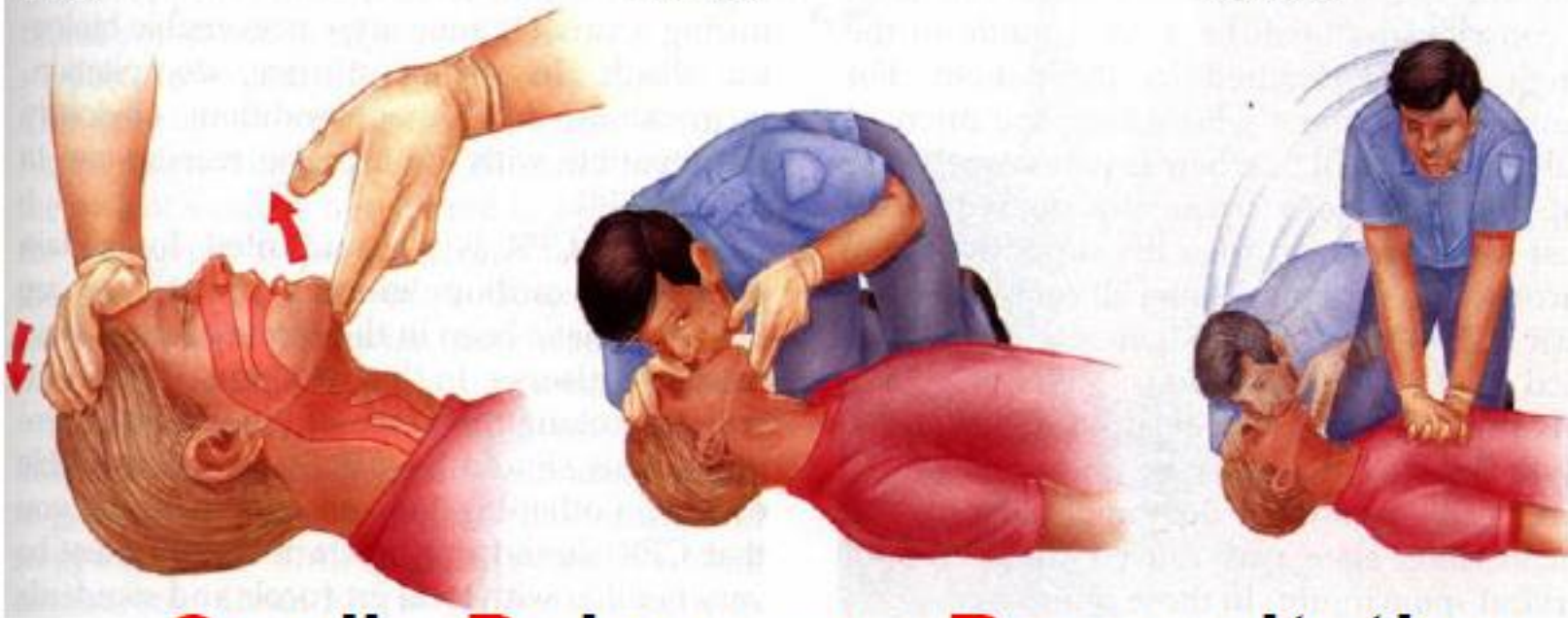
**B**

**C**

Airway

Breathing

Circulation



**C**ardio **P**ulmonary **R**esuscitation



# Artificial Circulation in Adults



## Cardio Pulmonary Resuscitation

### *Definition*

Cardiopulmonary Resuscitation (**CPR**) consists of mouth-to-mouth or mouth-to-nose respiration and chest compression.

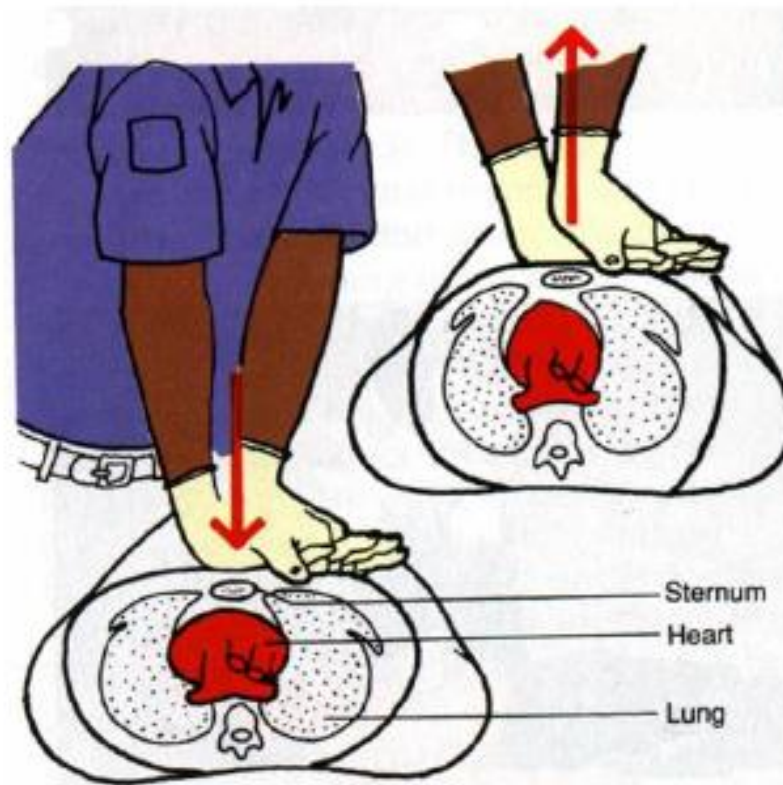
**CPR** allows oxygenated blood to circulate to vital organs such as the brain and heart.

**CPR** can keep a person alive until more advanced procedures (such as defibrillation – an electric shock to the chest) can treat the cardiac arrest.

**CPR** started by a bystander doubles the likelihood of survival for victims of cardiac arrest.



# Artificial Circulation in Adults



# Artificial Circulation in Adults



The correct hand position for chest compression

1



2

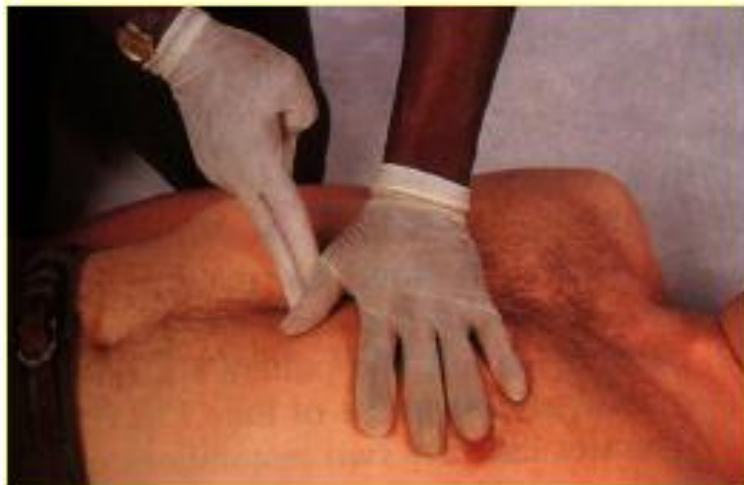


# Artificial Circulation in Adults



The correct hand position for chest compression

3



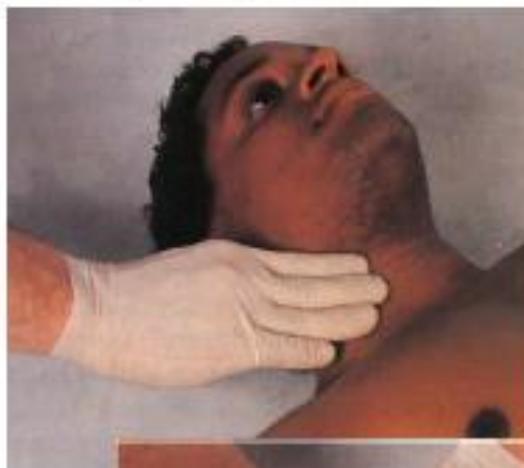
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# Artificial Circulation in Adults



## Checking for pulse



# CPR Guidelines for Adults

- Full Head Tilt
- 2 hands lower 1/2 of Sternum
- 1/3 depth of chest
- 30 compressions for every 2 Breaths
- Approx 5 Cycles of 30:2 every 2mins (100 per minute)
- Keep going until Medical aid arrives or Signs of Life



# CPR Guidelines for Child

- Half Head Tilt
- 1 hands lower 1/2 of Sternum
- 1/3 depth of chest
- 30 compressions for every 2 Breaths
- Approx 5 Cycles of 30:2 every 2mins (100 per minute)
- Keep going until Medical aid arrives or Signs of Life



# CPR Guidelines for Infant

- No Head Tilt
- 2 Puffs over nose & mouth
- 2 Fingers lower 1/2 of Sternum
- 1/3 depth of chest
- 30 compressions for every 2 Breaths
- Approx 5 Cycles of 30:2 every 2mins (100 per minute)
- Keep going until Medical aid arrives or Signs of Life



# RESUSCITATION (CPR)

Ensure the safety of everyone  
Call Triple Zero (000)

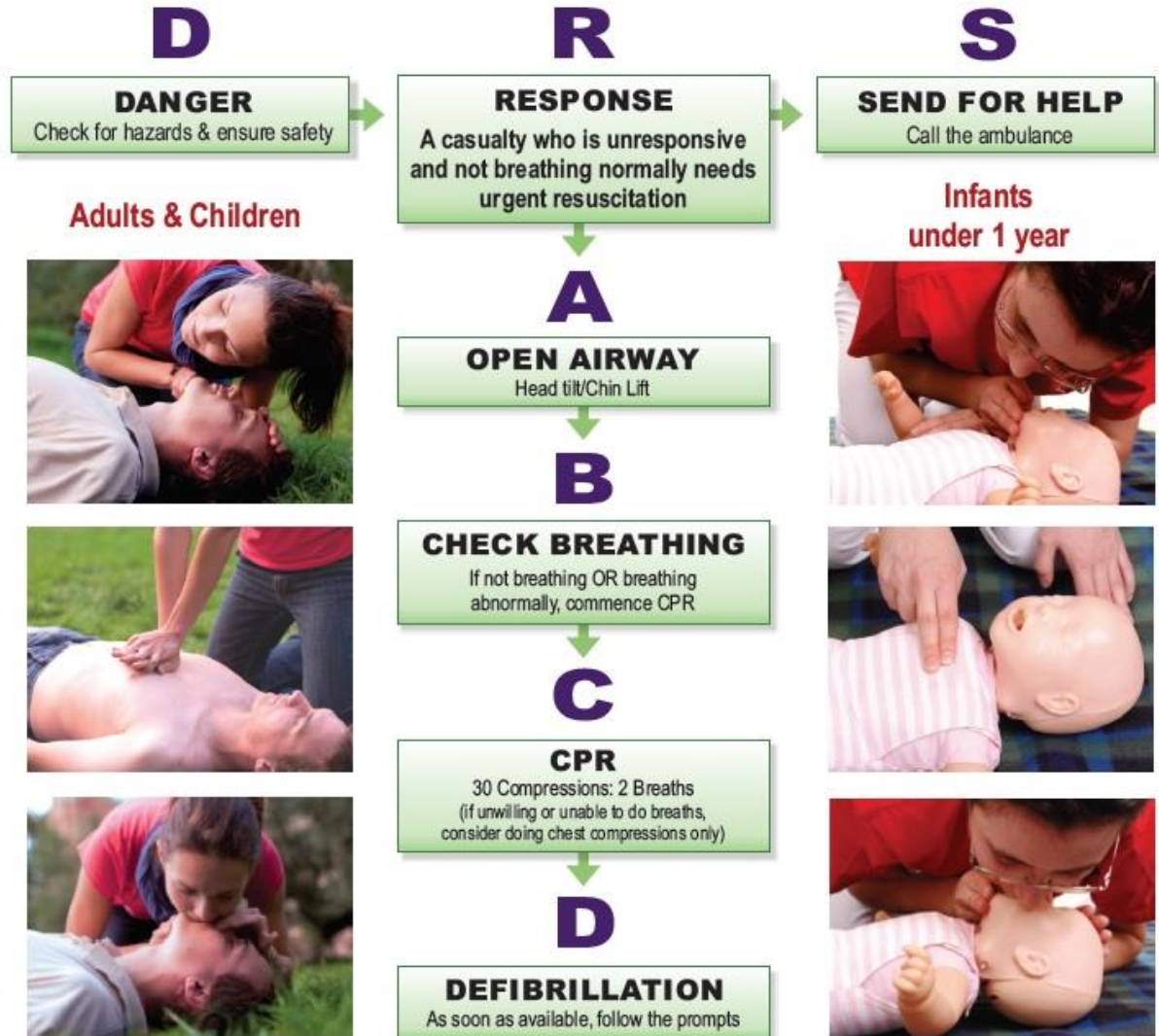
## Signs & Symptoms

Unconscious, unresponsive  
Not breathing normally or not breathing at all

	Adults and children	Infants under 1 year
Head tilt →	Yes	No
Pressure →	2 Hands	2 Fingers
Depth →	1/3 chest depth approx 5 cm	1/3 chest depth approx 4 cm
Breaths →	Full	Puffs
Ratio →	30 Compressions : 2 Breaths	
Rate →	Compressions should be performed at the rate of almost 2 per second (i.e. continuous rate of 100 per minute)	

For more information visit: [www.resus.org.au](http://www.resus.org.au)

Continue CPR and Defibrillation sequence until responsiveness or normal breathing returns, or help arrives



# What Is AED?



**Automatic External Defibrillator:** A device that can be used by anyone with a minimal amount of training to defibrillate someone whose heart has stopped.

**AED** is a computerised defibrillator which will analyse the victim's heart rhythm and if a shockable rhythm is determined it will instruct the user to deliver an electric shock. The AED provides on-going voice prompts to the operator for Basic Life Support (BLS) and calling emergency services.



# Using an AED

AEDs must only be used for victims who are unresponsive and not breathing normally. Attach AED as soon as available and follow its prompts.

CPR must be continued until the AED is turned on and pads attached. The rescuer should then follow the AED prompts.

The time to defibrillation is a key factor that influences survival. For every minute defibrillation is delayed, there is approximately 10% reduction in survival if the victim is in cardiac arrest

