



## What is Sudden Cardiac Arrest (SCA)?

**Definition:** Sudden, unexpected loss of heart function (no circulation of blood to vital organs and no pulse), breathing and consciousness.

Cardiac arrest occurs when the electrical impulses in the affected heart become rapid (ventricular tachycardia, or "VT") or chaotic (ventricular fibrillation, or "VF"), or both. These irregular heart rhythms are arrhythmias.

### SUDDEN CARDIAC ARREST IS DIFFERENT TO A HEART ATTACK!



VS



Cardiac arrest is an **electrical problem** where an arrhythmia prevents the heart from pumping blood to the brain and vital organs. There are generally no warning signs or symptoms.

The patient is considered clinically dead. CPR and defibrillation are critical to survival.

A heart attack is a **plumbing problem** where there are one or more blockages preventing blood flow and the heart muscle dies. Symptoms can include chest pain, dizziness, nausea, vomiting, etc. The patient is conscious.

The patient suffering a heart attack requires immediate medical attention. A severe heart attack may lead to a cardiac arrest.

### CAUSES

There are many reasons why a person will experience a cardiac arrest. These include:

Heart Conditions	Accidents/Incidents	Respiratory
Heart Disease Severe Heart Attack Genetic Heart Condition (Family History)	Drownings Drug Overdoses Trauma	Severe Asthma Severe Anaphylaxis



## NATIONAL STATISTICS

Across Australia each year, approximately 30,000 individuals experience an out of hospital cardiac arrest. 7,500 occur in New South Wales alone.

Survival of out of hospital SCA is less than

9%

For every minute that passes, the patient's chance of surviving decreases by

10%

With no CPR or defibrillation, the patient will suffer brain damage within

4 minutes

With no CPR or defibrillation, there is little chance of surviving SCA past

8 minutes

The average response times of the NSW Ambulance is

10 minutes

## WHAT ACTIONS ARE REQUIRED TO SURVIVE A CARDIAC ARREST?

The two critical actions that are required to attempt to save a person who experiences a cardiac arrest is effective cardiopulmonary resuscitation (CPR) and the use of an Automated External Defibrillator (AED).

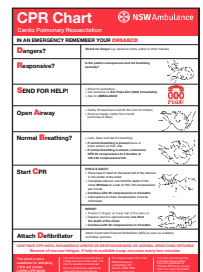
- CPR is used to replicate the heart function to circulate blood and oxygen to vital organs. It assists in buying vital time prior to the Ambulance response
- The AED is used to provide a shock to the patient's heart in an attempt to restart it.

Depending on the health of the person, not everyone will survive a cardiac arrest.

## DRSABCD

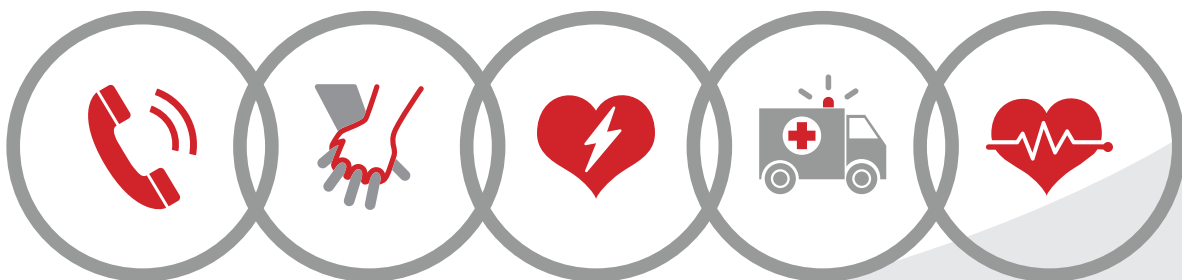
DRSABCD is taught in basic first aid in Australia and are steps that should be followed in every first aid emergency. It is also how to diagnose a person who is in cardiac arrest.

If a person is UNRESPONSIVE AND NOT BREATHING NORMALLY, you need to commence CPR and use an AED if one is available.



## CHAIN OF SURVIVAL

The Chain of Survival is recognised Internationally as a set of actions that is required to increase a patient's chance of surviving a cardiac arrest. If the links in the chain align and are done quickly, the patient's chance of survival can increase from less than 9% to more than 60%.



CALL FOR  
HELP

EARLY CPR

EARLY AED

AMBULANCE

HOSPITAL