

A guide for organisations

# Cardiac Arrest and Automated External Defibrillators



## What is cardiac arrest?

Cardiac arrest is the term given to the sudden loss of heart function. The heart is no longer pumping blood and oxygen around to the vital organs of the body. A cardiac arrest is different to a heart attack where a person is awake and has symptoms such as pain in the chest, difficulty breathing, nausea or feeling light-headed. If a person is experiencing a heart attack or more serious cardiac arrest, call Triple Zero (000) immediately for an ambulance.

Signs of a cardiac arrest are present when a person is:

- Unconscious
- Unresponsive
- Has no pulse
- Has absent or abnormal breathing

## How common is cardiac arrest?

Over 33,000 people experience an out of hospital cardiac arrest in Australia every year. Less than 9% will survive. For every minute that passes after a person has a cardiac arrest, the chance of survival decreases. Quick action could save a life.

## What actions can be taken to survive an out of hospital cardiac arrest?

Anyone can try to save the life of someone who has experienced a cardiac arrest by acting quickly to restore the heart beat with CPR and defibrillation.

If someone has suffered a cardiac arrest, take immediate action:

- **Call** Triple Zero (000) for an ambulance
- **Push** hard and fast in the centre of the chest to start CPR
- **Shock** using a defibrillator as soon as possible to restart the heart, if one is available

## What is cardiopulmonary resuscitation (CPR)?

Cardiopulmonary resuscitation (CPR) is the technique of chest compressions combined with rescue breathing. Early CPR saves lives. The Australian and New Zealand Committee on Resuscitation recommends that bystander CPR be actively encouraged. Resuscitation using the steps DRSABCD should be followed for cardiac arrest and is taught in all first aid courses in Australia. It is important that first aid skills are up to date.

Further information is available on the Australian Government's healthdirect website at: <https://www.healthdirect.gov.au/how-to-perform-cpr>

## What is an automated external defibrillator (AED)?

An automated external defibrillator (AED) is a small, portable device designed to deliver a controlled electrical shock to a person experiencing certain cardiac arrhythmias. Defibrillators must be used in conjunction with CPR.

- Anyone can use a defibrillator – they have verbal and visual instructions to guide people.
- A person cannot hurt someone by using a defibrillator.
- A defibrillator only shocks a person who is in cardiac arrest.

## Choosing an AED

An AED can be purchased by individuals and organisations of all types to enhance their first aid capabilities and response. NSW Health does not recommend a particular brand or model of defibrillator for public use. Consider the features of a defibrillator that best suit your situation.

Please ensure your unit of choice:

- is purchased from an Australian supplier
- has Therapeutic Goods Administration (TGA) approval
- is within your budget
- meets your requirements (eg child electrode pads, storage cabinets, 24/7 security option)
- has a high IP Rating suitable for outdoor use (IP55 or above)
- includes training for AED use and maintenance
- confirms maintenance requirements and warranty periods

## AED program implementation

After purchasing an AED, it is important to consider the following factors to implement an effective AED program for your organisation.



- **Location:** Nominate an accessible location specific for your organisation, e.g. first aid station, reception desk, entrance hallway.
- **Visible:** AED must be visible to all users and visitors.
- **Ready to use:** Battery & electrode pads must always be inserted.
- **Communication:** Communicate AED placement to staff, volunteers, nearby premises, larger community, etc.
- **Training:** Provide training for CPR and AED use, and ensure first aid qualifications of staff and volunteers are up to date.
- **Signage:** Use internationally recognised green AED signage to communicate there is an AED at your premises.
- **Maintenance:** Ensure unit is regularly monitored & maintained to manufacturer's recommendations. Appoint a responsible person(s) to take responsibility for the equipment.
- **Policies:** Ensure AED forms part of the operations of your premises, e.g. Fire Evacuation, First Aid response, risk assessments, training & induction programs.
- **Response:** Consider and plan your organisation's response to a cardiac arrest event at your premises.
- **Cross street:** Ensure all staff know the physical street address and cross street of your premises, to provide to Triple Zero (000) operator.
- **Debrief:** Debrief with those who are involved in or witness a real life cardiac arrest.