

## What is an Automated External Defibrillator (AED)?

An AED is a portable, electronic device that enables users to successfully diagnose and treat casualties who are suffering from the potentially life threatening condition of ventricular fibrillation (loss of rhythmic heart contractions, resulting in an inability of the heart to effectively pump blood).



The device achieves this by being able to undertake several functions:

- Electrodes collect information about the heart's rhythm and a microprocessor interprets the data to diagnose ventricular fibrillation
- If the casualty does not need defibrillation, the unit will typically not allow a shock to be administered, or at the very least will alert the user that a shock is not needed – some have override functions for trained medical personnel
- Most AED units will advise the user how to undertake the defibrillation by the way of voice prompts, usually along with a visual prompt
- If defibrillation is needed, the unit will advise the user to proceed with a shock by usually pushing a button, or if the unit is fully automatic, it will proceed to emit a shock after advising everyone to stand back.
- After a shock is delivered, the AED will usually advise the user to commence or recommence CPR