

Why Have A Defibrillator?

[You are here](#) > [Home](#) > [Defibrillators](#) > [Why Have A Defibrillator?](#)

In the year ending March 2014 there were more than 28,000 out-of-hospital cardiac arrests. Survival rates for out-of-hospital cardiac arrests are dependent on a number of factors including the presence of bystanders, time to arrival of the emergency services, prompt cardio pulmonary resuscitation (CPR) and early defibrillation (British Heart Foundation).

The British Heart Foundation states that following a cardiac arrest every minute that passes without the casualty receiving CPR and defibrillation their chance of survival is reduced by 10%.

With an emergency response vehicle reaching 75% of life-threatening 999 calls within 8 minutes (www.nhs.co.uk) the time between a casualties suffering a cardiac arrest and the emergency services arriving means that the chances of survival rapidly reduce. Having a defibrillator on-site whether it be a workplace, school, university or any public building means that life-saving treatment can be given to a casualty immediately, therefore dramatically increasing the chances of survival from a cardiac arrest.

Defibrillators are a simple and effective method of administering life-saving treatment to a casualty suffering from cardiac-arrest and can be used on both adults and children over the age of 1 years old. Defibrillators are extremely safe to use as they provide clear step-by-step instructions on how to use them and will only allow a defibrillation shock to be delivered to a casualty if one is required.

There is no doubting how vital defibrillators can be in saving-lives. Prompt delivery of defibrillation can result in survival rates as high as 75% (Resuscitation Council, UK). Having one close by could mean the difference between life and death.

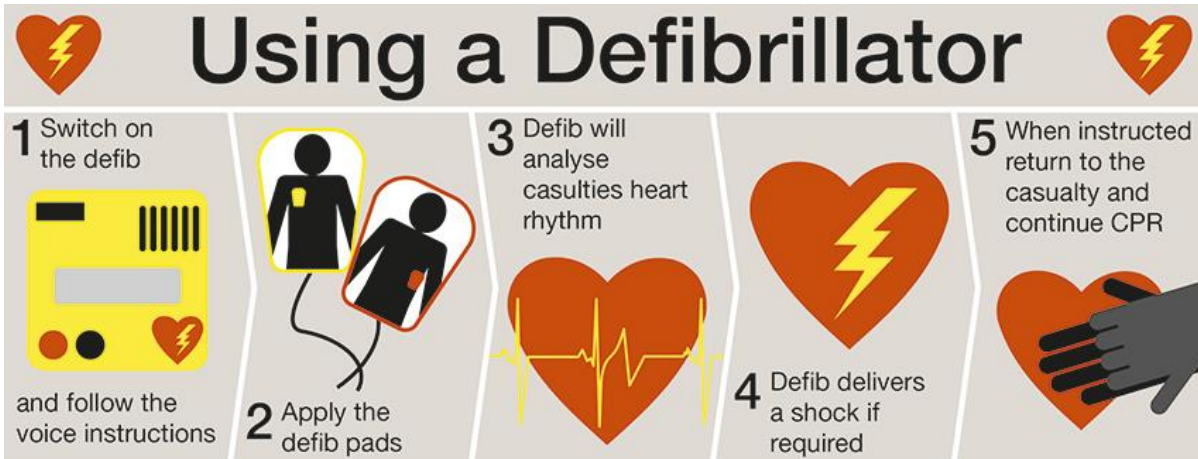
How Defibrillators Work?

[You are here](#) > [Home](#) > [Defibrillators](#) > [How Defibrillators Work?](#)

An Automated External defibrillator (AED) is a life-saving piece of equipment for use on casualties suffering from a cardiac arrest. They are a simple but extremely effective piece of life-saving equipment.

AEDs are designed to detect cardiac arrhythmias (electrical activity in the heart) which are life threatening. Only if the AED detects that there is a life-threatening arrhythmia will it allow a shock to be delivered. An AED will not allow a defibrillation shock to be delivered to a casualty who does not require one.

AEDs work accessing arrhythmia of a casualty and establishing if the casualty is in need of a defibrillation shock. When one is required the delivery of a shock to the heart aims to stop the irregular arrhythmia of a cardiac arrest and restore a regular arrhythmia. Prompt delivery of defibrillation can result in survival rates as high as 75% (Resuscitation Council, UK).



AEDs provide clear step by step guidance on how the defibrillator should be used, instructing the user through the process of preparing the casualty for defibrillation, applying the electrode pads and delivering the defibrillation shock.

AED's are available in two forms; semi-automatic and fully automatic. The semi-automatic models will inform the user if a shock is required and will instruct the user to press a 'shock' button on the defibrillator. Fully automatic models however do not require a button to be pressed. Upon identifying the need for a shock the AED will itself deliver the shock. Both types of AED will only allow a shock to be delivered if one is required.

Who can use a defibrillator?

Despite being a medical device Automated External Defibrillators are specifically designed to be used by persons that have not received medical training. Because of this they are an ideal piece of equipment to have in workplaces, schools, universities and all public spaces. By providing clear guidance for a user and only allowing a shock to be delivered if required, AEDs provide essential life-saving treatment and their immediate use whilst awaiting for the emergency services to arrive significantly increase the chances of a casualty recovering from a cardiac arrest.