



\*Please note, the above is just a selection of AEDs available. There are various other models on the market.

## AUTOMATED EXTERNAL DEFIBRILLATORS (AEDs)

AN AUTOMATED EXTERNAL DEFIBRILLATOR (AED), OR 'DEFIB', IS A SIMPLISTIC AND SAFE LIFE-SAVING DEVICE THAT IS USED TO DELIVER AN ELECTRIC SHOCK TO A PERSON'S HEART IN CARDIAC ARREST.

A person in cardiac arrest is unresponsive and is either not breathing at all or not breathing normally, as their heart has stopped pumping blood around their body. This is different to someone who is having a heart attack – they would normally be conscious and their heart working well enough at that moment to sustain life, and may have symptoms such as chest pain.

Many cardiac arrests actually happen because the person is having a heart attack. The heart attack may cause a dangerously abnormal rhythm, which can cause a cardiac arrest and be fatal.

If someone has a cardiac arrest, it's sometimes possible to shock the heart back into a normal heart rhythm by using an AED to give their heart an electric shock, combined with effective cardiopulmonary resuscitation (CPR).

AEDs are simplistic, small, lightweight, portable boxes about the size of a laptop which can be used by anyone – even people who have never seen or used one before. They can come in various shapes, sizes and colours, and are made by a number of different manufacturers, but they all tend to function in broadly the same way.

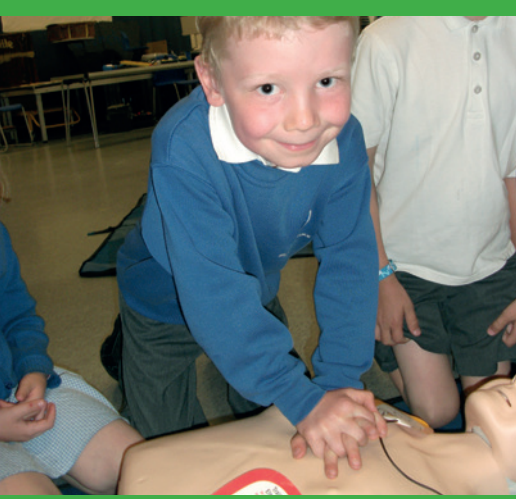
Today's AED machines are built to be easy to use. They're safe, reliable and give verbal and visual instructions that tell the user exactly what they need to do. So if someone has a cardiac arrest, you shouldn't be scared to use one - the AED will not let you shock a person if it is not appropriate.

## DID YOU KNOW?

A cardiac arrest is the most serious medical emergency.

For every minute that a person is in cardiac arrest, their chances of survival are greatly reduced.

Inside, there are two sticky electrode pads which stick to the person's bare chest. After turning on an AED, the user is guided at every step by voice, and in some cases, visual prompts. The prompts will not move onto the next step until the required action has been completed. If an electric shock is required, the machine will tell the user – all they have to do is follow the instructions. The machine analyses the person's heart rhythm to decide if a shock is necessary or not.



## DID YOU KNOW?

Early CPR and the use of an AED significantly increases a person's chances of survival. The instigation of this sequence of events is known as the 'chain of survival'.

**Public access defibrillator (PAD)** is the term used to describe the use of AEDs in a public place. Some communities have AEDs in secure boxes. This is called a **community public access defibrillator (cPAD)**. If required, the user would call 999 to gain access with a code.

Some areas with a dedicated community resuscitation programme have higher than national survival rates.

Remember, an AED only allows the user to give a shock when it detects a particular, abnormal heart rhythm, therefore making it impossible to shock someone who does not need it. An AED will not allow a shock to be given to someone unless they are in cardiac arrest.

An AED can be used safely and effectively without previous training. However, training should be encouraged to help improve the time to shock delivery and correct pad placement. The UK Resuscitation Council states that untrained bystanders should not be discouraged from using the device in an emergency. They are simple to use and cannot do any harm to the person – more importantly, **it could help save their life.**

**Early defibrillation can triple a person's chances of survival should they suffer a cardiac arrest.**

Remember, standard AED pads are suitable for use on children older than eight years. Paediatric pads should be used in children aged between one and eight years if they are available; if not, standard adult-sized pads can be used.

AEDs can also be used on pregnant women – the most important thing to do is assist the mother as the child will not survive otherwise.

All AEDs perform self tests of internal circuitry and battery levels, and will alert the user of any problems. There is no annual maintenance but it is advised that weekly, visual checks are carried out. AEDs do not need to be left on charge.

**CPR can buy invaluable time before using an AED and can more than double the chances of survival.**

For further information, please visit: [www.cardiacsmart.nwas.nhs.uk](http://www.cardiacsmart.nwas.nhs.uk) or [www.nwas-responders.info](http://www.nwas-responders.info).



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### Chinese

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### Gujarati

જો તમને આ દસ્તાવેજ બીજી કોઈ ભાષા કે સ્વરૂપમાં જોઈતો હોય, તો કૃપા કરીને અમારો સંપર્ક કરો.

### Polish

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### Somali

Haddii aad ku rabto xaashadan luqad ama qaab kasta oo kale fadlan nala soo xidhiidh.

### Urdu

اگر آپ کو چاہئے کہ اس دستاویز کو کسی اور زبان یا دیگر شکلیں میں حاصل کریں۔

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