

## What is a defibrillator or AED?

A defibrillator delivers an electrical current through the chest which aims to shock the heart back into a normal rhythm allowing it to pump again. Rapid response using automated technology can significantly improve the quality of life of a survivor as the longer the brain is starved of oxygen, the more damage that can occur.

An AED is a portable defibrillator which uses intelligent technology to shock a 'shockable' heart rhythm. When applied to a patient, a sequence of voice commands and screen messages guide the user through the defibrillation process. This means the machine may be used safely by people with no medical background. The simplicity of modern AED technology has opened a window for the public to take on a key role supporting the emergency services who may be hindered by the time it takes to reach a patient.



## What is Sudden Cardiac Arrest?

Sudden Cardiac Arrest (SCA) is an electrical malfunction of the heart where the heart stops pumping blood due to an abnormal rhythm known as an arrhythmia. As an individual loses pulse, consciousness and the ability to breathe, they verge on death and can only be brought back to life in a very small window of time using a defibrillator or AED.

## What is the Community Heartbeat Trust?

Community Heartbeat Trust is a national charity focussed on the provision of life saving defibrillation equipment to local communities. Working in co-operation with the Ambulance service, its aims are:

- ♥ To support communities in provision of AED Community Public Access Defibrillation (cPAD) services
- ♥ To promote, educate and train in all aspects of 'First Person on Scene', 'Emergency First Aid', 'Basic Life Support' and similar medical programmes and schemes
- ♥ To fully support the establishment of Community Responder (or similar) schemes in local communities.

The charity is run by local groups offering advice and support to meet these aims on a local basis.

**Your local CHT contact organisation is:**



**ALWAYS DIAL 999  
IN AN EMERGENCY**

**cPAD SCHEMES DO NOT REPLACE THE AMBULANCE  
SERVICE BUT MAY HELP SAVE LIVES ONCE AN  
AMBULANCE HAS BEEN CALLED**

**COMMUNITY HEARTBEAT TRUST**

REGISTERED OFFICE:  
78 Loughborough Road, Quorn, Leicestershire, LE12 8DX  
REGISTERED CHARITY NUMBER: 1132824



**YOU ONLY  
HAVE MINUTES  
TO SAVE A LIFE**

*Community Public Access Defibrillation*

*Playing a part  
protecting your heart...*

**COMMUNITY  
HEARTBEAT**  
The Community HeartBeat Trust

# What is Community Public Access Defibrillation (cPAD) all about?

THE TARGET SET BY THE GOVERNMENT FOR AMBULANCE TRUSTS ALL OVER THE UK IS TO REACH 75% OF LIFE THREATENING CALLS WITHIN 8 MINUTES. STATISTICS SHOW THAT EARLY DEFIBRILLATION CAN INCREASE THE SURVIVAL CHANCES OF A PERSON WHO HAS SUFFERED A SUDDEN CARDIAC ARREST (SCA) BY AS MUCH AS 50%.

The Government's 8 minute target is easier to achieve in towns and cities. But what happens in more remote areas of the UK where small communities and organised events are either difficult to access or located 10 miles or more from their nearest hospital? In these situations, access to emergency first aid equipment, including an Automatic External Defibrillator (AED) for use by the public, can make the difference between life and death. There are different ways to achieve this i.e. through the establishment of community responder schemes and by providing Community Public Access Defibrillation (cPAD) equipment in an accessible location coupled with the provision of good first aid training to members of the local community.

AEDs can be based inside shops and village halls, but for 24/7/365 access it is better that they are kept in high-visibility weatherproof cabinets. Because these are located on external walls in public places e.g. outside a post office or village hall, they may be accessed 24/7. The cabinet can only be opened by a member of the public with an access code given by the emergency services via a 999 call. As part of the Community Heartbeat scheme, public awareness sessions and a community training programme can be arranged to ensure that everyone is aware of the AED's location and how to use it in case of an emergency.

**“In the UK alone, figures show that approximately 200 people per day suffer a SCA. Moreover, British Heart Foundation statistics show that for every minute that passes; the chances of survival decrease by 14%. AEDs need to become as common as fire extinguishers in all public places and work environments because they are as equally important when saving lives. The Community Heartbeat scheme is fantastic and should be held up as the gold standard for community defibrillation programmes across the country.”**

SEAN INGRAM - CARDIAC SCIENCE, UK



## DID YOU KNOW?

- ♥ Sudden Cardiac Arrest (SCA) happens between 140,000 and 200,000 times a year in the UK, making it one of the UK's largest killers. The potential for saving a life is dependent on time; the faster medical help is administered, the better the chance of survival.
- ♥ To achieve a positive outcome when dealing with SCA, medical assistance must be given within 4-5 minutes of the event. In remote areas it can take more than 8 minutes for an emergency medical team to arrive on scene and this is why Community Public Access Defibrillators (cPAD) play a vital role in helping to save lives in rural communities.
- ♥ Statistics suggest that the survival rate after a SCA with CPR alone is 5%. By using a defibrillator, the survival rate increases to 50%.
- ♥ According to the British Heart Foundation's Guide to GPs, 'the development of the automated external defibrillator (AED) has been described as the most important advance in resuscitation practices for many years. The AED has made the whole process of defibrillation simpler and has greatly increased the range of people who can use one.'
- ♥ Current international resuscitation guidelines advise that evidence supports the establishment of public access defibrillation programmes (with the installation of an AED) when:
  - The frequency of cardiac arrest is such that there is a reasonable probability of the use of an AED at least once in two years.
  - The time from call out of the conventional ambulance service to delivery of a shock cannot reliably be achieved within 5 minutes. (For practical purposes, this means almost all of the United Kingdom).
  - The time from collapse of a victim until the on-site AED can be brought is less than 5 minutes.

[www.communityheartbeat.org.uk](http://www.communityheartbeat.org.uk)

THE CHT & PEOPLE 'HEART' LOGO ARE TRADEMARKS OF THE COMMUNITY HEARTBEAT TRUST