Sudden cardiac arrest (SCA) is one of the leading causes of death in Europe. (Perkins, G D European Resuscitation Council Guidelines for Resuscitation)

SCA is different from a heart attack. SCA is the abrupt loss of heart function that occurs when the heart's electrical system malfunctions.

A heart attack can lead to a cardiac arrest but they are not the same thing. A heart attack happens where is a sudden interruption to the blood supply to part of the heart muscle and it is starved of oxygen rich blood.

In general , the risk of SCA in young people approximately doubles during physical activity and is two to three times higher in athletes compared to non athletes (Tidy, Sudden Cardiac Deatch in Young People)

- Approximately 30,000 Out of Hospital Cardiac Arrests occur every year in the UK
- Approximately 80% of Out of Hospital Cardiac Arrests occur at Home; 20% will occur in public places
- Passive smoking increases the risk of developing coronary heart disease by up to 30%
- 12 people under the age of 35 die every week due to sudden cardiac arrest in the UK
- 270 children die in the UK every year after suffering a Sudden Cardiac Arrest at school
- Without immediate treatment, 90-95% of Sudden Cardiac Arrest victims will die
- When someone has a cardiac arrest, every minute without CPR and use of defibrillator reduces the chances of survival by 10%. The chances of survival go from 100% to 0% in 10 minutes
- The emergency services average response time to a cardiac event related incident in an urban area has increased from 8 to 11 minutes
- If a defibrillator is used and effective CPR is performed within 3-5 minutes of cardiac arrest, survival chances increase from 6% to 74%
- Currently, only 20% of cardiac arrest victims are in a 'shockable' rhythm when the EMS arrive; this figure can be increased if more cardiac arrest victims received immediate, effective CPR from bystanders

When someone has a cardiac arrest, if certain things happen in a certain order, their chances of survival are hugely increased. This concept is known as the Chain of Survival

What is a defibrillator?

An Automated External Defibrillator (AED) delivers a high energy electric shock to a victim in Sudden Cardiac Arrest (SCA) to restore the heart's normal rhythm. AEDs are compact, portable, easy to use and guide the operator through the process with prompts and commands. The AED precisely analyses the victim's heart rhythm and will only deliver a shock if it is required.

Defib Store believe in offering the best quality market leading defibrillators to pair up with our market leading highest quality outdoor waterproof defibrillator cabinets.

All of the AEDs we supply are very reliable and will not allow a shock to be given unless it is needed. It isnt possible to do any harm to a person who has collapsed in suspected SCA. They are safe to use and present minimal risk to the rescuer. These features make them suitable for use by members of the public with modest or even no training, and for use in Public Access Defibrillation schemes.

Installation

Installing a Community Public Access Defibrillator (CPAD) in an external defibrillator cabinet on an outside wall, ensures the Automated External Defibrillator (AED) can be accessible 24/7 to anyone in the vicinity who requires it.

Siting a Defibrillator

CPADs should be ideally sited centrally in the community, which is accessible to the public, well lit and easily described (when the Ambulance Service direct someone to the cabinet).

Whilst the defibrillators do not require power, the cabinets have a heating element to keep the device at the correct temperature. All cabinets therefore have to be installed somewhere with a power supply.

CPADs are often placed on village halls, public houses, restaurants, schools, shops and even in disused telephone boxes which have been adopted by the local community. An electrician is required to install the cabinet

Registering a Defibrillator

Public Access Defibrillators should be registered with the local ambulance service. The ambulance service will require details of the defibrillator , location of the defibrillator and external cabinet and access code for the keypad lock on the cabinet.

In the event of somebody collapsing through heart attack/cardiac arrest, the emergency services will direct a rescuer to their nearest Public Access Defibrillator, if it is within 500m from the patient's location. Guidelines are that a rescuer should always remain with the patient but a second rescuer should be able to get to the defibrillator and back to the patient ideally within 3-5 mins.

The cabinets have a keypad lock and the code is accessed by calling 999 which means the device remains secure.

Maintenance

All CPADs require a “Guardian” who can check the defibrillator and cabinet on a regular basis and check that the defibrillator is rescue ready. Most defibrillators perform daily/weekly self checks and have an indicating light which is lit, if there is a problem with the defibrillator.

Pads and batteries have expiry dates and should be changed every 2/4 years depending on the model. Pads are single use. (Defib Store offer a free reminder service for expiry dates on pads and batteries)