Sudden cardiac arrest (SCA) is a leading cause of premature death, but with immediate treatment many lives can be saved. Defibrillation is a crucial stage in a sequence of events that need to occur for resuscitation of a victim of SCA. The first step is summoning the emergency services as soon as possible, the second step is providing basic CPR (chest compressions alternated with rescue breaths) to keep the victim alive until the third step defibrillation can be performed.

**Sudden Cardiac Arrest – The Facts:**
Sudden cardiac arrest (SCA) is an abrupt loss of pulse and consciousness caused by an unexpected failure in the heart’s ability to effectively pump blood to the brain and around the body.

In England in 2013, the Emergency Medical Services (EMS) attempted to resuscitate approximately 28,000 cases of out-of-hospital cardiac arrest.¹

Many SCA victims, can be saved if persons nearby recognise what has happened, quickly summon the ambulance service, perform basic cardiopulmonary resuscitation (particularly chest compressions) and use a defibrillator to provide a high energy electric shock to restore the heart’s normal rhythm. Each of these stages is vital in order to provide the best chance of survival, but the critical factor is the speed with which the shock is given. Defibrillation within 3-5 minutes of collapse can produce survival rates as high as 50-70%.²

**Factors that may increase the risk of a Sudden Cardiac Arrest:**
SCAs are unpredictable and can happen to anyone, any time, anywhere. However, there are factors that can severely increase the possibility of a SCA. You are at higher risk if you:

- have previously suffered a heart attack or heart disease
- have a family history of heart problems
- have unknown heart problems
- are a victim of asphyxiation (drowning, choking etc.)
- are a victim of electrocution
- have had an impact or trauma to the chest

Many factors in the workplace can also delay the timely delivery of potentially lifesaving resuscitation.

- Businesses based in remote locations will likely be subject to longer response times by the emergency services.
- Urban or multi-storey locations could be difficult for emergency responders to reach due to the need to negotiate traffic, staircases, elevators, escalators or crowds of people.
- Industrial campuses or businesses with spread out facilities could also prove hazardous if first aid equipment and defibrillators are located in a distant building.

The only definitive treatment for SCA is defibrillation - an electric current that “shocks” the heart so that a normal rhythm may resume. This “shock” must be delivered within minutes of the arrest to successfully prevent death. For the best chance of survival, defibrillation should be delivered within the first four-six minutes. The likelihood of successful resuscitation decreases by around 7-10% with every minute that passes and after 10 minutes without defibrillation, few attempts at resuscitation are successful.³ As the average response time for emergency medical services in a typical community is eight minutes,⁴ an automated external defibrillator (AED) placed on site could mean the difference between life and death.

³ [https://www.resus.org.uk/publications/a-guide-to-aeds/](https://www.resus.org.uk/publications/a-guide-to-aeds/)
If **defibrillation** is delivered promptly, survival rates as high as 50-70% have been reported.²

**Defibrillators – The Benefits**

There is currently no legislation in place in the UK or Ireland which obliges certain businesses or premises to provide an Automated External Defibrillator (AED), however AED’s have been described as the single most important development in the treatment of SCA.⁵

AEDs are easy to use, compact and portable. They are completely safe to use and will not allow a shock to be given unless the heart’s rhythm requires it. Machines are also designed to be stored for long periods without use and require very little routine maintenance.

Whilst first aid training courses and specific training on the use of defibrillators are available, circumstances often dictate that no trained operator is present on site when an emergency strikes. Therefore the Resuscitation Council (UK) states that “the use of AEDs should not be restricted to trained personnel.”⁶ With this in mind, the latest defibrillators on the market are purpose designed so that everyone, including the untrained user, can easily use the equipment.

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**Case Study**

In August 2013, former Ryder Cup captain, Bernard Gallacher, collapsed during a dinner at a hotel on the outskirts of Aberdeen. Without any warning, Bernard had suffered a SCA which had caused his heart to stop beating.⁷

Fortunately for Bernard, the hotel had a defibrillator on site and as a result of the immediate actions of staff with CPR and the use of early life-saving shocks from a defibrillator, he survived. He went on to make a full recovery and had an implantable cardioverter defibrillator (ICD) fitted to prevent further cardiac arrests. Since the incident, Bernard has gone on to campaign to raise awareness of the need for defibrillators at golf clubs and as many public venues as possible.

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¹ [https://www.resus.org.uk/publications/a-guide-to-aeds/](https://www.resus.org.uk/publications/a-guide-to-aeds/)
² [https://www.resus.org.uk/pages/AEDtrnst.htm](https://www.resus.org.uk/pages/AEDtrnst.htm)
³ [www.heartrhythmalliance.org/aa/uk/bernard-gallacher-defibrillator-campaign](www.heartrhythmalliance.org/aa/uk/bernard-gallacher-defibrillator-campaign)
Defibrillators available at Arco

**Lifeline AED Semi-Automatic Defibrillator**

The Lifeline AED is a semi-automatic external defibrillator - once you’ve placed the pads on the patient it will check to see if defibrillation is needed, prompting the user to press the shock button.

- 5-year battery as standard but an Industry leading 7-year battery option also available.
- Clear and concise voice instructions.
- Portable and lightweight - 1.9 kg.
- Hardwearing - tested to military standards.
- IP54 ingress protection rating - high water and dust protection.
- Low maintenance - daily self-tests and a bright status indicator light.
- 8-year warranty.
- Training conversion kit available.

Ref: 55G0001

**Lifeline AUTO Automatic Defibrillator**

The Lifeline AUTO has all the same features as the Lifeline AED; with the difference that the shock is delivered automatically without the need to press the shock button, ensuring treatment is only delivered when needed.

Ref: 55G0016

**Lifeline VIEW Semi-Automatic Defibrillator**

The Lifeline VIEW has all the great features of the Lifeline AED and is the first AED to offer step-by-step visual feedback for performing CPR, rescue breathing and external defibrillation.

- Full colour video screen.
- Clear and concise voice instructions.
- 4-year battery option.
- Portable and lightweight - 1.4 kg.
- IP55 Ingress Protection rating - one of the highest dust and water protection ratings on the market.
- Training conversion card available.

Ref: 55G0011

**Lifeline Defibrillator Schools Package**

The Lifeline AED has been proven to be the world’s simplest automated external defibrillator to use, with calm voice prompts and only two buttons to press. The Lifeline AED allows first aiders to deliver life saving care within seconds but is so simple to use that anyone can use it without being medically trained.

Kit includes:
- Lifeline AED Semi-Automatic Defibrillator
- 5-year lithium battery pack
- 1 pair of defibrillation pads
- 1 pair of paediatric defibrillation pads – pre-connected
- Rescue kit – including wipes, face shield, gloves, scissors, swab & razor
- 10 minute overview DVD – showing the features of the AED

Ref: 55G0050

**Lifeline AED and AUTO Defibrillator Training Package**

A range of accessories compatible with both the AED and AUTO versions of Defibtech’s Lifeline defibrillators.

Ref: 55G0004

- Lifeline Defibrillator Training Pack
- 55G0002 Battery Pack 5-Year
- 55G0003 Battery Pack 7-Year
- 55G0005 Adult Pad Pack of 2
- 55G0006 Adult Training Pad Pack of 2
- 55G0008 Defibrillator Soft Case
- 55G0041 Paediatric Pad Pack of 2

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Arco Limited P.O. Box 21, Waverley Street, Hull HU1 2SJ
www.arco.co.uk
Telefunken AED Defibrillator Bundle

Simple, easy-to-use Defibrillator that comes in a bundle to ensure you have all essential items.

- Fully-automatic AED designed to deliver a shock if it is required. The first aider does not need to press a shock button.
- Battery and electrodes have a 3-year standby time.
- Training unit is to be used for training only and does not administer a shock.

Kit includes:
- Telefunken AED Defibrillator
- AED Defibrillator Wall Bracket
- AED User Guide for Untrained Personnel A2 Poster
- Automated External Defib Sign
- Nearest Automated External Sign
- Defibrillation and CPR A2 Poster
- AED Trained Personnel Sign

Ref: 55G0080

LifePak CR Plus Fully Automatic AED Bundle

This fully automatic model is designed to deliver a shock only if it determines a heart needs it.

- Weekly and monthly self tests ensuring its always ready to use and will alert you if the battery is low
- It includes a 4-indicator readiness display that provides you with an instant visual check to let you know that the AED is ready to use.
- Comes with an 8 year warranty

Kit includes:
- LifePak CR Plus AED Defibrillator
- AED Trained Personnel Sign
- Defibrillator and CPR A2 Poster
- AED User Guide for Untrained Personnel A2 Poster
- Nearest Automated External Sign
- Automated External Defib Sign
- AED Defibrillator Wall Bracket
- AED Responder Kit

Ref: 55G0090

Mediana A15 AED Semi-Automatic Defibrillator

This easy to use defibrillator instantly switches between adult and paediatric without having to change the pads allowing for quick and easy rescue when required.

- Suitable for all schools, clubs and groups.
- Automatic switch on when lid opened.
- Pads attached, ready for use.
- Pads fit both Adults and Paediatrics.
- Bundle comes complete with SD card and AED prep kit.
- SD card records any activity and vital information from the patient, giving the emergency service access to patient history.
- Comes with free online training course.

Ref: 55G0105 Mediana A15 Bundle
55G0101 Defibrillator
55G0102 Adult/Paediatric Pads
55G0103 SD Card
55G0104 Battery Pack
55G0200 AED Prep Kit