



Understanding Sudden Cardiac Arrest and Defibrillation

PHILIPS

What Is Sudden Cardiac Arrest?

Sudden Cardiac Arrest (SCA) is one of the most common causes of death in developed countries. SCA often occurs as a result of a heart attack, when the heart is starved of oxygen. **SCA is an electrical malfunction of the heart typically associated with an abnormal heart rhythm known as ventricular fibrillation (VF).** It is a condition in which the heart's electrical impulses suddenly become chaotic, causing the heart to quiver, rather than pump in a normal rhythm. Victims collapse and quickly lose consciousness, often without warning. Unless a normal heart rhythm is restored within minutes, survival is highly unlikely. The average survival rate of SCA outside the hospital is less than five percent.

How Do You Treat Sudden Cardiac Arrest?

A heart in ventricular fibrillation is most effectively treated with defibrillation. To defibrillate the heart, an electrical shock is applied to help restore a normal rhythm. **Defibrillation is recognized as the definitive treatment for ventricular fibrillation.** Defibrillation administered within the first five minutes after collapse gives the highest chance of success. For every minute that goes by without defibrillation, a victim's chance of survival decreases by 7-10 percent. Thus, the most important element in the treatment of VF is providing rapid defibrillation therapy.

Does Early Defibrillation Ensure Survival From SCA?

Unfortunately early defibrillation will not save every victim. **Early defibrillation does however provide the best chance of resuscitation and survival for someone suffering sudden cardiac arrest caused by ventricular fibrillation.**

Who Is At Risk For Sudden Cardiac Arrest?

SCA is largely unpredictable. It can strike anyone, anywhere, at anytime—often without warning. Many victims have no prior history or symptoms of heart disease. In fact, 50 percent of the sudden deaths in men and 64 percent of those in women occur in persons with no prior symptoms of heart disease. Other factors besides heart disease and heart attack can cause SCA, including respiratory arrest, electrocution, drowning, choking or trauma.

Where Does Sudden Cardiac Arrest Most Commonly Occur?

SCA can occur anywhere but **nearly 80 percent of all arrests occur in the home**, and the majority of those are witnessed by another person. Defibrillators in private residences may reduce the time it takes to deliver therapy, which may help save more lives.

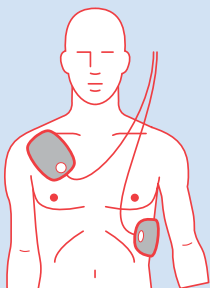
Three steps to restart a heart

1 Pull



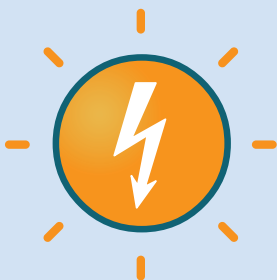
Pull the cartridge handle to begin the rescue.

2 Place



Place the adhesive pads on the patient's chest exactly as shown in the picture.

3 Press



Press the flashing orange shock button when advised.

What Is An Automated External Defibrillator (AED)?

An AED is a small, compact device used to analyze a person's heart rhythm for any abnormalities and, if necessary, directs the user to deliver an electric shock to the victim of sudden cardiac arrest.

The main difference between AED's and manually operated defibrillators often used by medical professionals is that AED's are designed for use by people who may not have the extensive training required to use a manual defibrillator.

Philips AED's are very simple to operate. You don't need to recognize or interpret heart rhythms, the AED does so automatically. The Philips HeartStart Home Defibrillator uses clear, natural voice instructions that guide the user through each step.

Is Defibrillation Hard To Learn?

No! Defibrillation using an AED is easy to learn. Firefighters, flight attendants, first aid personnel, security staff, and others have used AED's to help save thousands of lives. AED's are being placed in medical and dental offices, clinics, health clubs, sports arenas, golf clubs, casinos, airports and other public places.

Why The Need For “Early” Defibrillation?

Time. **Only one out of every 20 SCA victims survives—some of these lives could potentially be saved through timely defibrillation.** With a brief window of opportunity for effective intervention, it is vital that a victim be defibrillated within the first few minutes of arresting. Published data show that nearly 80 percent of cardiac arrests occur in the home. Yet, survival rates are 30-50 percent lower than in public places.

A series of four critical steps—called the “Chain of Survival”—have been identified for the treatment of sudden cardiac arrest. These steps include: early access to care (i.e. calling emergency services); early cardiopulmonary resuscitation (CPR); early defibrillation; and Step Four: early institution of advanced cardiac life support as needed.



De 'chain of survival' is een door de Amerikaanse hartstichting ontwikkeld en wereldwijd goedgekeurd responsmodel

Can I Really Make A Difference?

Yes! **The only effective treatment for SCA is prompt defibrillation.** The availability of easy-to-use AED technology means that defibrillation can be a part

of all CPR programs. Greater access to defibrillators will help save lives from what is often a treatable, yet unpredictable, emergency.

Should I Obtain A Philips HeartStart Home Defibrillator For Myself Or My Family?

Philips is the global leader and trusted choice in AED technology. **Philips offers a full range of AED's to help improve survival outcomes wherever and whenever sudden cardiac arrest occurs.**

We strongly advise you to consult your General Practitioner or cardiologist before acquiring a home defibrillator for your own use. In the UK a prescription is NOT required to acquire a home defibrillator. You cannot use a defibrillator on yourself. Victims of cardiac arrest are unconscious and not breathing.

Anyone who is likely to use the defibrillator should be prepared to undertake some basic training and refresher self training at regular intervals. Basic training and self training materials are provided by Philips.

Additional training is recommended and is available from a number of UK organizations including the St. Johns Ambulance and the Red Cross. The British Heart Foundation also coordinates a range of training programs.

How Do I Obtain A Philips HeartStart Home Defibrillator?

Home defibrillators are NOT available on the NHS but must be obtained with your own resources. In some cases the purchase or rental of a home defibrillator may be exempted from VAT (check with our authorized distributors).

You can obtain a Philips Home Defibrillator from our authorized distributors in the UK and Ireland. For more information please visit www.heartstarthome.com (UK).

A home defibrillator may be purchased outright, purchased on a monthly payment finance plan, or rented on a short or long term basis. For full details, please contact one of our authorized UK and Ireland distributors.



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