

Sudden Cardiac Arrest (SCA)?

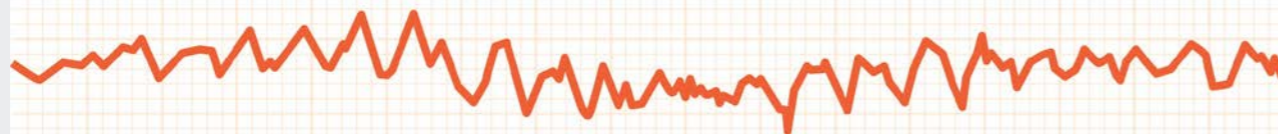


“The best public access defibrillator”

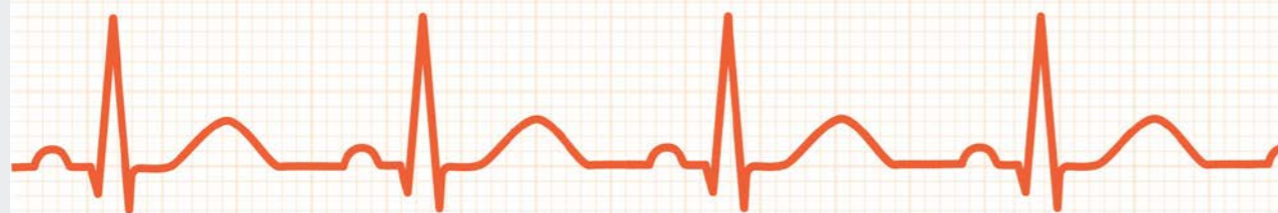
What is Sudden Cardiac Arrest?

- Sudden Cardiac Arrest (SCA) is the condition in which the heart is no longer able to pump blood to the brain and the rest of the body.
- Most of the cases (about 80%/o), SCA is caused by a chaotic fast heart rhythm, which is called Ventricular Fibrillation (VF).

ECG trace of a patient in VF: (Ventricular Fibrillation)



ECG trace of a patient with a normal heart rhythm



Facts & Figures

According to BHF statistics, in 2011:

- There were over 74,000 premature deaths attributed to SCA
- 1 in 6 Males died prematurely



- 1 in 9 Females died prematurely



Facts & Figures

- Four times more women die as a result of a heart attack than they do from breast cancer.
- 12 people under the age of 35 die every week due to sudden cardiac arrest in the UK.
- 70% of cardiac arrests occur outside of the hospital environment.
- Effective bystander CPR, provided immediately after SCA, can double a victim's chance of survival.
- Cardiac Arrest is Europe's biggest killer. More so than Cancer or Crime.
- Around 270,000 people suffer a heart attack in the UK each year, about a 1/3 die before reaching hospital due to cardiac arrest.
- The Department of Health has a target of placing 3,000 new defibrillators in public places in England.
- Early defibrillation can triple a victim's chance of survival.



Causes of SCA

- Mostly unpredictable
- May be caused by certain incidents like:
 - Heart Attack
 - Respiratory Arrest
 - Drowning
 - Trauma
 - Electric Shock
 - Stress
 - Drugs
 - Sudden Emotional Changes
 - Excessive Physical Activity



Leading Risk factors of SCA

- Previous Heart Attack
75% of SCA cases are linked to a previous heart attack. A person's risk of SCA is higher during the first six months after a heart attack.
- Coronary Artery Disease
50% of SCA cases are related with coronary artery disease. Risk factors for coronary artery disease include smoking, family history of cardiovascular disease, high cholesterol or an enlarged heart.

Additionally:

Diabetes, high cholesterol, high blood pressure, smoking, drug or alcohol abuse, excess weight, high fat diet, sedentary lifestyle, stress, certain medications (over-the-counter and prescriptions, including decongestants and diet and herbal supplements)



What is CPR

- CPR stands for "Cardiopulmonary Resuscitation".

CPR
Chest Compressions
+
Rescue Breaths





British Heart
Foundation

Emergency Solutions



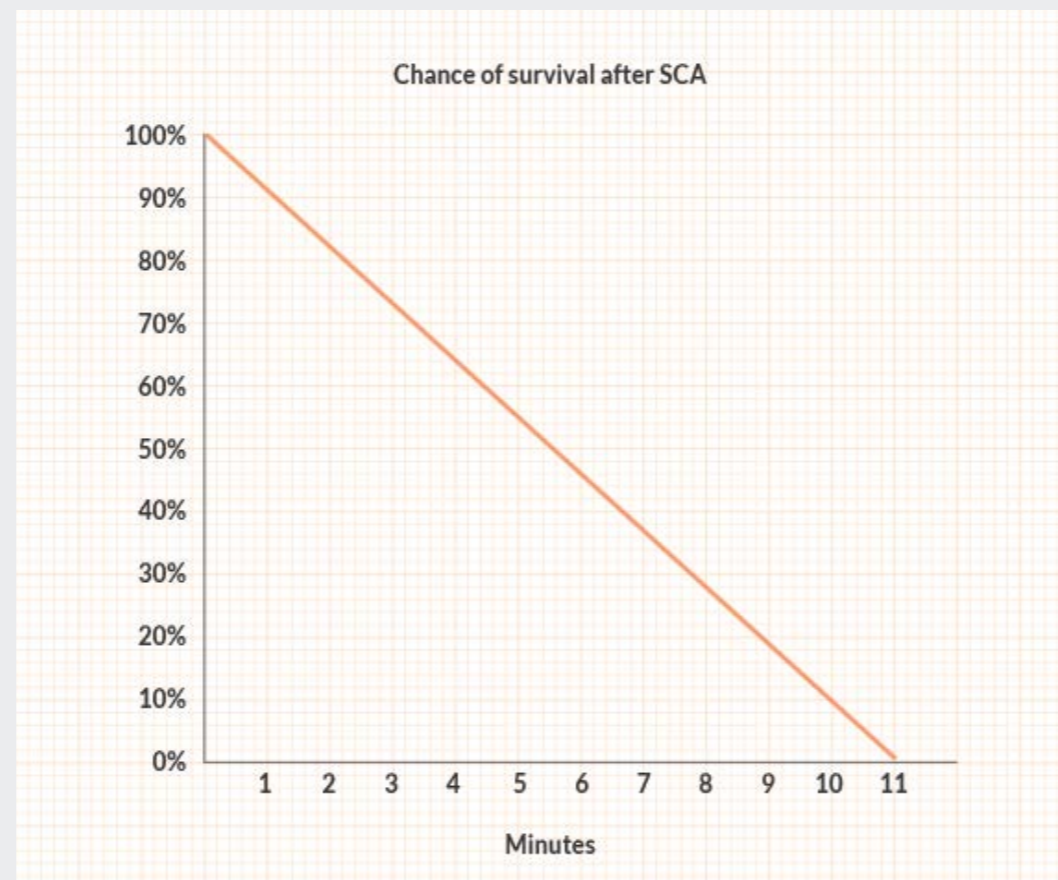
The only treatment of sudden cardiac arrest is
immediate defibrillation and CPR.

Automated external defibrillators (AED) are designed
to make immediate defibrillation possible.



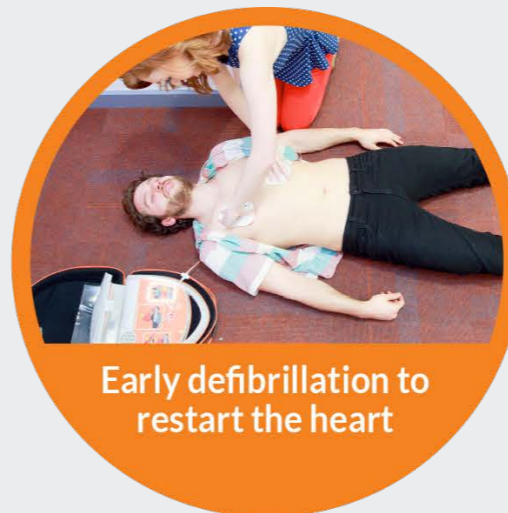
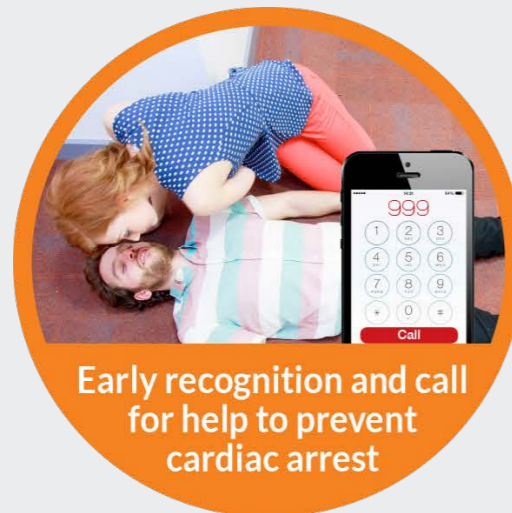
Why is Early Defibrillation Critical?

Because chances of survival decrease by about **10%** with every minute without defibrillation.



Chain of Survival

Difficulty of reaching to the patient on time causes the “Early Defibrillation” to be the weak link.



The solution is increasing the availability of AED's.





Thank you!



“The best public access defibrillator”