



Arrhythmia Alliance  
@ info@heartrhythmalliance.org

## Sudden Cardiac Arrest (SCA) vs Heart Attack

A sudden cardiac arrest and a heart attack are both an emergency situation. Dial 911 immediately.

### What is the difference between sudden cardiac arrest and a heart attack?

Simply, a *sudden cardiac arrest* is an 'electrical' malfunction in the heart that causes it to stop beating, depriving the brain, lungs, and other organs of vital oxygen.

A *heart attack* is a 'plumbing' problem when one of the coronary arteries become blocked, preventing oxygen-rich blood reaching the heart.

| Sudden Cardiac Arrest (SCA)  | Heart Attack (Myocardial Infarction)   |
|--|--|
| <p><b>How do I know if I am witnessing a sudden cardiac arrest (SCA)?</b></p> <p>Initial signs that an individual is experiencing sudden cardiac arrest are:</p> <ul style="list-style-type: none"> <li>• Sudden collapse</li> <li>• Loss of consciousness</li> <li>• No pulse</li> <li>• No breathing</li> </ul> <p>Prior to going into cardiac arrest, an individual may complain they are experiencing:</p> <ul style="list-style-type: none"> <li>• Shortness of breath</li> <li>• Tightness in the chest</li> <li>• Pounding heart or strange flutterings</li> </ul> <p><b>What do I do when an individual collapses?</b></p> <ul style="list-style-type: none"> <li>• If you think someone has gone into cardiac arrest, first call 911 immediately. They will be unconscious</li> <li>• Perform CPR to the beat of 'Stayin' Alive' to maintain blood flow to the brain and heart until the arrival of a defibrillator (AED) and paramedics. CPR is vitally important as it buys time before the heart can be re-started with a defibrillator</li> <li>• Defibrillation: An AED sends an electric shock to the heart in an attempt to restore its normal rhythm. If it is a community AED, follow the instructions until emergency services arrive. You cannot harm the patient</li> </ul> | <p><b>How do I recognize the signs that someone is having a heart attack?</b></p> <ul style="list-style-type: none"> <li>• Heart attack symptoms can vary in discomfort from mild to severe. They can be sudden or experienced over days</li> <li>• Chest pain, including pressure or mistaken indigestion that does not go away</li> <li>• Pain in either arm, spreading up to the neck and back</li> <li>• Nausea, sweating, dizziness</li> </ul> <p><b>What do I do if an individual is having a heart attack?</b></p> <ul style="list-style-type: none"> <li>• It is essential to dial 911 immediately, as a heart attack is a medical emergency</li> <li>• A patient is likely to be aware, but will be struggling with chest pains and discomfort, as well as being frightened</li> <li>• Reassure that medical help is coming. Make the individual comfortable</li> </ul> |





Arrhythmia Alliance  
@ info@heartrhythmalliance.org

## How can CPR and an AED make a difference?

Early defibrillation using an AED is the only way to re-establish the heart's natural rhythm following sudden cardiac arrest. CPR is necessary to keep the patient alive until the heart rhythm is restored. It is essential AEDs are publicly accessible, so life-saving equipment is available to anyone, whatever time of day.

**It is safe to use an automated external defibrillator (AED) on someone who has a pacemaker or implantable cardioverter defibrillator (ICD). It is important not to place the pads in contact with, or directly over the device. The pads are usually placed on the upper right of the chest and on the left side of the rib cage, so a device should not get in the way. If someone has an implanted device, you will notice a scar and a bump. Place the pad to the side of the device (about 3cm).**

**The shock produced could affect the functioning of the pacemaker or device, however the benefits of using the AED to save someone's life outweigh this potential risk. If you receive CPR or defibrillation, you should have your device checked afterwards to ensure the settings are still accurate. If you have any questions or concerns, please contact your cardiologist.**

## Who can use an AED?

Anyone! Using an AED is easy and can cause no harm when instructions are followed. The Resuscitation Council AED Guidelines advise that an AED can be used safely and effectively without previous training and therefore should not be restricted to trained rescuers. AEDs analyze the heart's rhythm and will only deliver a shock if needed and if no one is in danger. Everyone should familiarise themselves with AEDs.

### To learn more

[www.defibssavelives.org](http://www.defibssavelives.org)  
[info@defibssaveslives.org](mailto:info@defibssaveslives.org)

To view our patient resources, scan the QR code below:



**Acknowledgments:** Arrhythmia Alliance would like to thank all those who helped in the development and review of this publication. In particular, thanks is given to Dr Charlotte D'Souza.

## Fast action can save lives.

**Acting quickly could be the difference between life and death and can greatly improve survival rates and limit damage.**



**Founder & Trustee:** Trudie Lobban MBE, FRCP (Edin)  
**Executive Director:** Francesca Calahan  
Registered Non-Profit 501(c)(3)  
© Arrhythmia Alliance  
Published July 2022 | Reviewed November 2025

