



# THE CHAIN OF SURVIVAL

Being part of a resuscitation attempt

# CONTENTS

1. Introduction
2. What happened?
3. What happens to the patient now?
4. Did I do the right thing?
5. Why can't I think clearly?
6. What happens to me now?
7. Where can I get more information?

Sudden Cardiac Arrest UK provides peer support and resources for survivors and those affected by the survivor's event. Dr Michael Smith, Consultant Cardiologist Dr Thomas Keeble, Clinical Psychologist Dr Marco Mion (both from the Essex Cardiothoracic Centre, UK) and SCA survivor Paul Swindell have kindly created this document for distribution to anyone who has been a part of or witnessed a resuscitation attempt.



## Introduction

**If you have been part of a resuscitation attempt, either as a witness or in an active role such as performing CPR, you may have many questions about what has happened.**

This experience can also generate a wide range of emotions and it is common for people to feel distressed or guilty that they didn't do more. If you played an active role then you should be feeling proud of the part you played to try and save a life, but we know that it can also be traumatic for anyone involved. This leaflet aims to provide some information about resuscitation and the responses of those who have been involved. Information on further support is also provided at the end of this leaflet.

### What is CPR?

Cardiopulmonary Resuscitation, better known as CPR is providing chest compressions to keep the blood and oxygen pumping around the body. Trained professionals may also perform mouth-to-mouth breathing but evidence shows for laypersons that hands-only CPR is the most effective. Performing CPR on someone who has had a cardiac arrest can significantly improve their chances of survival.

### What is a defibrillator?

A defibrillator is a device that gives a high energy electric shock to the heart of someone who is in cardiac arrest. This shock is called defibrillation and is an essential part of trying to save the life of someone who is in cardiac arrest.

However, not all cardiac arrests can be treated in this way and so even if present at the scene it may not be used to provide defibrillation. A defibrillator may also be referred to as a defib, an AED (Automated External Defibrillator) or a PAD (Public Access Defibrillator).

## What happened?

**A cardiac arrest is when the heart stops beating and the person stops breathing normally.**

In this scenario, every second counts. *The Chain of Survival* puts in motion key links which will help give the person who has collapsed the best chance of making a good recovery. Calling for help, providing CPR or retrieving a defibrillator are all vital links in the chain. When the ambulance service arrives, they will be able to take over the care of the patient from those who have helped in those vital first few minutes.

When someone suffers a cardiac arrest they will collapse. They may make some

jerking movements as if they are having a seizure. They may also initially make some gasping breaths as the body makes an extra attempt to get oxygen into the lungs despite not being able to breathe normally. As the person is not getting enough oxygen into their body they may start to turn blue.

Once CPR is started, several things may occur which may be confusing or distressing but are actually normal. This may include ribs breaking, ongoing movements, eye-opening or vomiting. Attempts may also be made to shock the heart back into a normal rhythm using a defibrillator.



## What happens to the patient now?

**When the paramedics assess and treat the patient, they will decide the next action based on many things.**

They will consider, for instance, the age of the person, how soon CPR was started after the cardiac arrest, how long it has been ongoing, what any monitors are showing and the person's medical history to name but a few. If the heart has been restarted, the patient will be taken to the hospital and may remain in a critical state so will likely be cared for in the intensive care unit. They will have investigations into the cause of their cardiac arrest and the effects that it has had on the brain and the rest of the body.

If they are unable to restart the heart, the patient may be transferred to the hospital with CPR ongoing if it is felt that there is an intervention that can be provided which is not available to the paramedics. This is less common because paramedics have a wide range of skills and can treat most reversible cardiac arrests.

Unfortunately, due to the severity of illnesses that lead to cardiac arrest, less than 1 in 10 people survive this event out of hospital. It is understandable that in this situation those involved in the resuscitation may feel guilty that they were unable to save the person's life, but nothing could likely have been done. Information on bereavement support is provided at the end of this leaflet.

## Chain of survival



## Did I do the right thing?

Whatever your role in the resuscitation attempt was, be it doing CPR, calling the emergency services, supporting others or anything else, your actions will have significantly increased the person's chance of survival. Doing nothing gives them no chance but doing something could save a life; without intervention, the person will not be able to survive. For this reason, any action that you took could only benefit the person.

## Why can't I think clearly?

When you have witnessed or been involved in a resuscitation attempt it is a very stressful and traumatic experience. Your body will therefore undergo a stress response and produce hormones such as adrenaline which will have effects on the body. Sometimes this state is referred to as 'hyperarousal' as the person feels on edge. It is also normal at this stage to have headaches and feel light-headed, sweaty, nervous and feel as though time has slowed down. These hormones are usually broken down over a few hours, but in some people, these symptoms will persist for several days. If you are experiencing these symptoms, we would advise you to avoid tasks that require quick thinking such as driving.

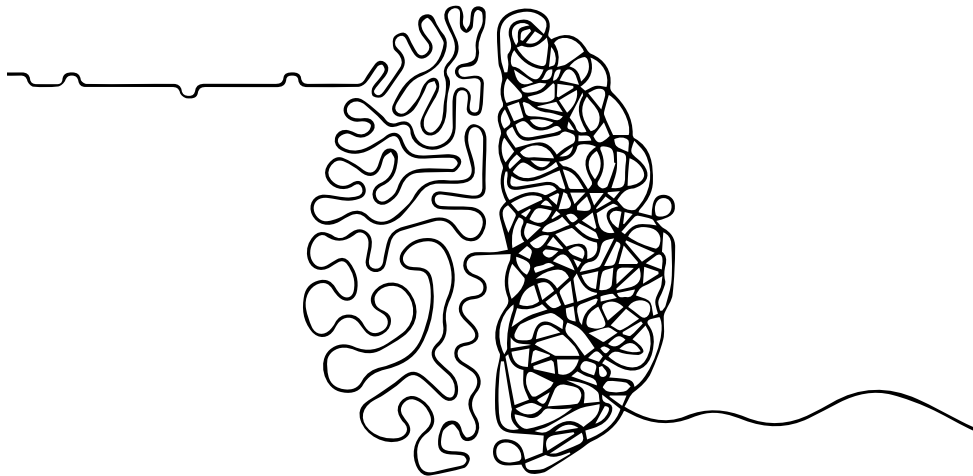
## What happens to me now?

In the first weeks, it is common to feel like your thoughts are fixated on the event. You may find yourself having flashbacks or dreams about it. This can disrupt sleep, which in turn can cause issues with irritability and difficulty concentrating.

We would encourage you to talk through your experiences with someone you know and trust so they can reassure you and help you process what you have seen. You may also want to understand more about what happened, and there is a section at the end of this leaflet with further resources. We would also recommend taking simple steps to improve your sleep pattern and considering trying

mindfulness (there are some great resources available such as the Headspace mindfulness app for your phone).

A small percentage of people may experience more severe symptoms such as intrusive and distressing flashbacks, feelings of hopelessness or guilt, or avoidance of normal activities. This is still a normal reaction to the events experienced, however, it means more support may be needed. In this situation, we would encourage you to seek professional help through your GP or self-refer through the [NHS Improving Access to Psychological Treatment programme \(IAPT\)](#).





## Where can I get more information?

The [Sudden Cardiac Arrest UK website](#) has a wealth of information on cardiac arrest and its after-effects.

The information is primarily targeted at survivors and their families, but it can still be useful for understanding the impact of a resuscitation attempt. Peer support communities can be invaluable for working through your experience and Sudden Cardiac Arrest UK run a number of Facebook groups for this purpose: [Chain of Survival UK](#) for anyone who has been part of a resuscitation attempt and [Sudden Cardiac Arrest UK](#) for survivors and their families. See the Useful Links section for further resources.



## Useful Links

### Information

[suddencardiacarrestuk.org](http://suddencardiacarrestuk.org)

[chainofsurvivaluk.org](http://chainofsurvivaluk.org)

[lifeaftercardiacarrest.com](http://lifeaftercardiacarrest.com)

[BHF.org.uk](http://BHF.org.uk)

### Facebook Peer Support Groups

For survivors and their families

[SuddenCardiacArrestUK](#)

For anyone who has participated in, or witnessed a resuscitation attempt

[ChainOfSurvivalUK](#)

### Psychological Help

[scauk.org/counselling](http://scauk.org/counselling)

[NHS.uk/mental-health](http://NHS.uk/mental-health)

[mind.org.uk](http://mind.org.uk)

### Bereavement

[scauk.org/bereavement](http://scauk.org/bereavement)

[sadsuk.org.uk](http://sadsuk.org.uk)

[cruse.org.uk](http://cruse.org.uk)

 [info@SuddenCardiacArrestUK.org](mailto:info@SuddenCardiacArrestUK.org)

 [@WeAreSCAUK](https://twitter.com/WeAreSCAUK)