

# Information for relatives of patients admitted to the Intensive Care Unit after an out-of-hospital Cardiac Arrest

Intensive Care Unit

## Introduction

The Doctors and Nurses on the intensive Care Unit will have explained that your relative has had a Cardiac arrest (their heart stopped for a period of time) and they have been admitted to the unit for on-going care.

This is a very worrying time for you and your family and we appreciate that it can be very confusing. The aim of this short leaflet is to give you an outline of the care that your relative will receive over the coming days. It does not replace information that the Medical and nursing staff will give you and we encourage you to ask questions.

## What has happened?

Your relative has been admitted because their heart stopped beating. There are a number of causes for this (the most common is a heart attack). The treatment from bystanders and paramedics meant that their heart started beating again. They have been admitted to the ICU to allow us to look for problems we might be able to fix and to look for evidence of damage from the arrest.

## What damage can have occurred?

The most important damage that occurs when someone's heart stops is that blood stops flowing to the brain. The brain needs a continuous supply of oxygen from the blood and even short periods of no oxygen can unfortunately result in severe damage. However, it is impossible to quantify the damage very early in the admission and this is why over the following days the doctors and nurses will look for evidence of any damage.

Another common organ damaged is the heart, especially if the underlying problem was a heart attack. Heart attacks can sometimes be treated by the heart doctors (Cardiologists) taking the patient to theatre and putting stents in blocked arteries. This will have been considered for your relative and done if thought it would help. In addition, in the ICU the doctors here can use drugs to try and support the function of the heart for a period of time to see if a very weak heart can recover.

Other important organs (kidneys/liver) can be damaged from the lack of blood flow and they may need support as well.

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

# What are the outcomes for people admitted to ICU after a cardiac arrest?

Looking at information from across the UK we know that unfortunately only about half (50%) survive to go home.

The average stay in the ICU is 4 to 6 days.

If the person survives to leave ICU their total stay in hospital is usually about 14-21 days.

## What will happen next?

Your relative will be cared for on the ICU.

The main aim is to prevent any more damage to the brain (we cannot reverse any damage that has already happened).

For the first day or so they will usually be kept asleep and their temperature will be controlled so that they avoid fever.

After this we will look to wake your relative up. Some people wake up quickly and some take longer.

If people do not wake up quickly we use a number of tools to help us work out how much damage the brain has suffered.

The things we look for are:

1. Examination findings: Does the person's pupils work normally? Does the person move normally to a stimulus (usually a bit of pain such as a pinch)? These findings are very important and are among the best guide we have for assessing the amount of damage. We also look to see if they breathe and cough on their own. If the person doesn't do that it means there is very severe damage.
2. Scans: We scan people's brains often on admission and then often again between days 3 and 5 if they do not wake up. We are looking for evidence of damage such as swelling or bleeding that are associated with poor outcomes. It is important to realise that scans are just pictures of a very complex organ and normal scans do not mean there has been no damage just that it is not large enough to be seen on a picture.
3. Tracings of electrical activity of the brain (EEG): We ask our colleagues from the Neurology team to record the electrical activity of the person's brain. They then tell us if it looks normal or not. There may be evidence of seizures (fits) that unfortunately are usually a bad sign. Equally the tracing may be flat and show no change to stimuli which tells us there has been severe damage.

## Deciding what to do next.

Hopefully over the days following admission your relative will improve and wake up.

Unfortunately, in about half of the people admitted to ICU after a cardiac arrest this is not the case. International recommendations guide us that we should normally wait until the third day of admission to start making any decisions about on-going care so that people have the best chance to recover. However in some cases it is clear that the damage is too severe and we may need to make decisions earlier.

The ICU team will talk to you about the results of the tests described above to help you understand the chance of your relative waking up normally.

If the ICU team thinks there has been no or little damage then we will continue to support your relative on the ICU for longer with the care that we can give (breathing machines etc).

However, if the ICU team thinks there has been devastating damage we will discuss with you what is best for your relative in the long term. Unfortunately, this usually means that your relative will not wake up. In these sad circumstances the correct step is often to remove the machines supporting the person and let them die peacefully. If this is the correct decision then we will ensure that your relative is not in any pain or distress to the best of our abilities. The team looking after your relative will discuss this with you in more detail if needed.

## A special situation: Brain death

In some cases when we turn off the drugs that may have been keeping the person asleep it is clear that the damage has been so severe they cannot start to breath on their own. In these circumstances we look to see if the person is Brainstem dead. This is a special situation where we know that even though their heart is beating the vital basic systems of the brain do not work and the person is not conscious and will never improve. The ICU team will discuss this with you in more detail before performing the tests required.

## Conclusion

We hope that this short leaflet has been useful and explains what will happen over the coming days. It is an outline to the care your relative will receive.

The Medical and Nursing staff are always happy to answer any questions and will explain what is happening to your relative in detail. This leaflet is a guide to the process and you should remember that the care will be tailored to your relatives specific needs.

## Contact Numbers

To be added by Author

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。