



**British Heart  
Foundation**

# Beating my **Heart** **attack**

*Paul McArdle*

**FIGHT  
FOR EVERY  
HEARTBEAT**

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



# ABOUT THE BRITISH HEART FOUNDATION

As the nation’s heart charity, we have been funding cutting-edge research that has made a big difference to people’s lives.

But the landscape of cardiovascular disease is changing. More people survive a heart attack than ever before, and that means more people are now living with long-term heart conditions and need our help.

Our research is powered by your support. Every pound raised, every minute of your time and every donation to our shops will help make a difference to people’s lives.

If you would like to make a donation, please:

- call our donation hotline on **0300 330 3322**
- visit **bhf.org.uk/donate** or
- post it to us at BHF Customer Services, Compton House, 2300 The Crescent, Birmingham Business Park, Birmingham B37 7YE.

For more information, see **bhf.org.uk**



Find out more about our life saving heart research at **bhf.org.uk/research**

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## ABOUT THIS BOOKLET

This booklet is for people who have had a heart attack and their family and friends. Another name for a heart attack is a myocardial infarction.

This booklet explains:

- what a heart attack is
- why heart attacks happen
- the tests needed to see if you've had a heart attack
- the treatment you'll have if you've had a heart attack
- what happens to your heart after a heart attack
- how you recover in the days and weeks after your heart attack
- what cardiac rehabilitation is, and
- what you can do to reduce your risk of further heart problems.



For more information on heart attacks, including an animation showing the possible causes, visit [bhf.org.uk/heartattack](https://bhf.org.uk/heartattack)

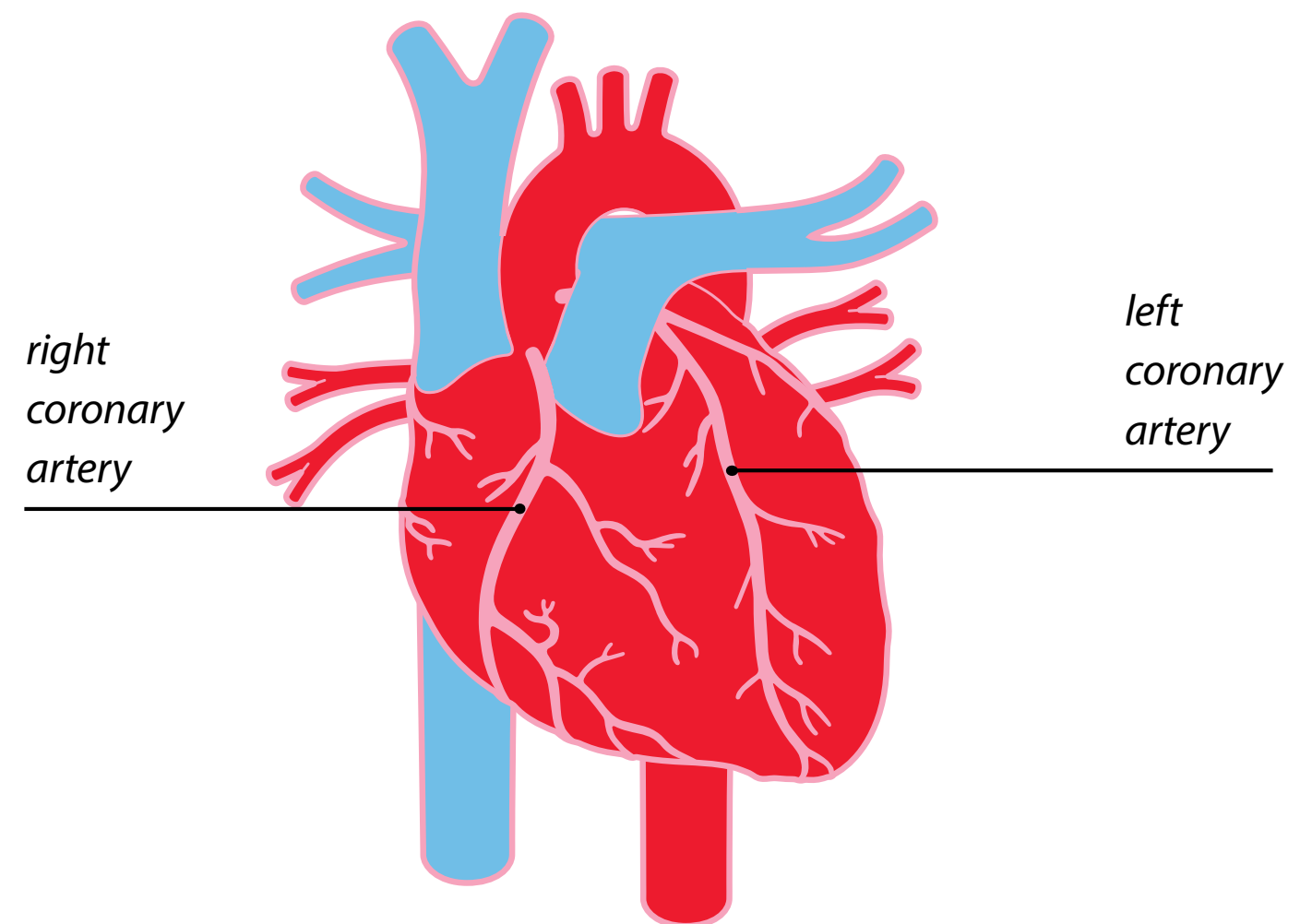
## HOW THE HEART WORKS

03

To understand what happens during a heart attack and what causes it, it helps to know how your heart works.

Your heart is a muscle that pumps blood around your body, delivering the oxygen and other nutrients that your body needs through a system of arteries.

Your heart muscle gets its own supply of blood from the coronary arteries. These are blood vessels on the surface of your heart.

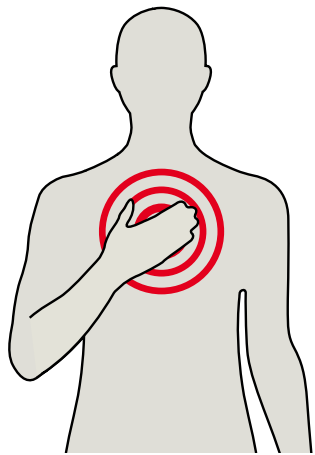




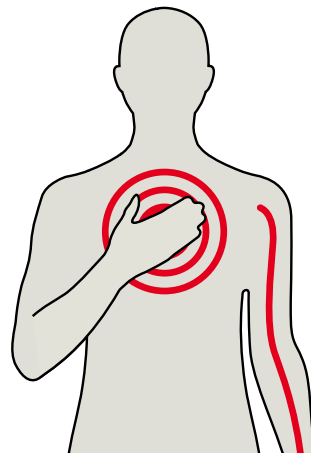
## HEART ATTACK? THE SYMPTOMS ... AND WHAT TO DO

A heart attack, often called a myocardial infarction or MI, is when a part of the heart muscle suddenly loses its blood supply. This is usually due to coronary heart disease.

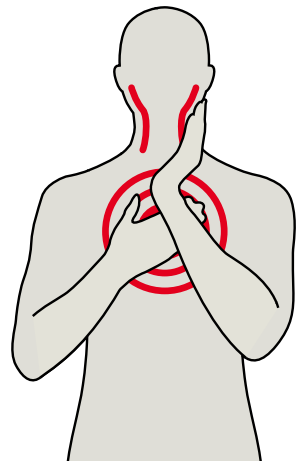
### The symptoms of a heart attack



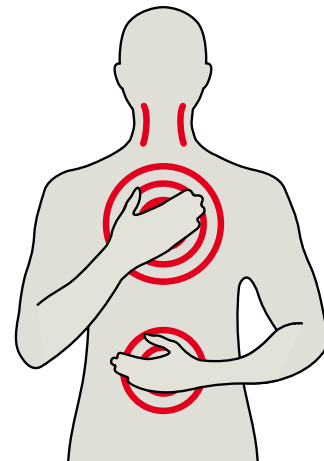
*Pain or discomfort in the chest that doesn't go away.*



*The pain may spread to the left or right arm ...*



*... or may spread to the neck and jaw.*



*You may feel sick or short of breath.*

## ACT FAST...

What to do if you think someone is having a heart attack

**1** Send someone to call 999 for an ambulance immediately.

If you are alone, go and call 999 immediately and then come straight back to the person.

**2** Get the person to sit in a comfortable position, stay with them and keep them calm.

**3** Give the person an adult aspirin tablet (300mg) to chew if one is easily available, unless they're allergic to aspirin or they've been told not to take it.

If you don't have an aspirin next to you, or if you don't know if the person is allergic to aspirin, just get them to stay resting until the ambulance arrives.

### What happens during a heart attack?

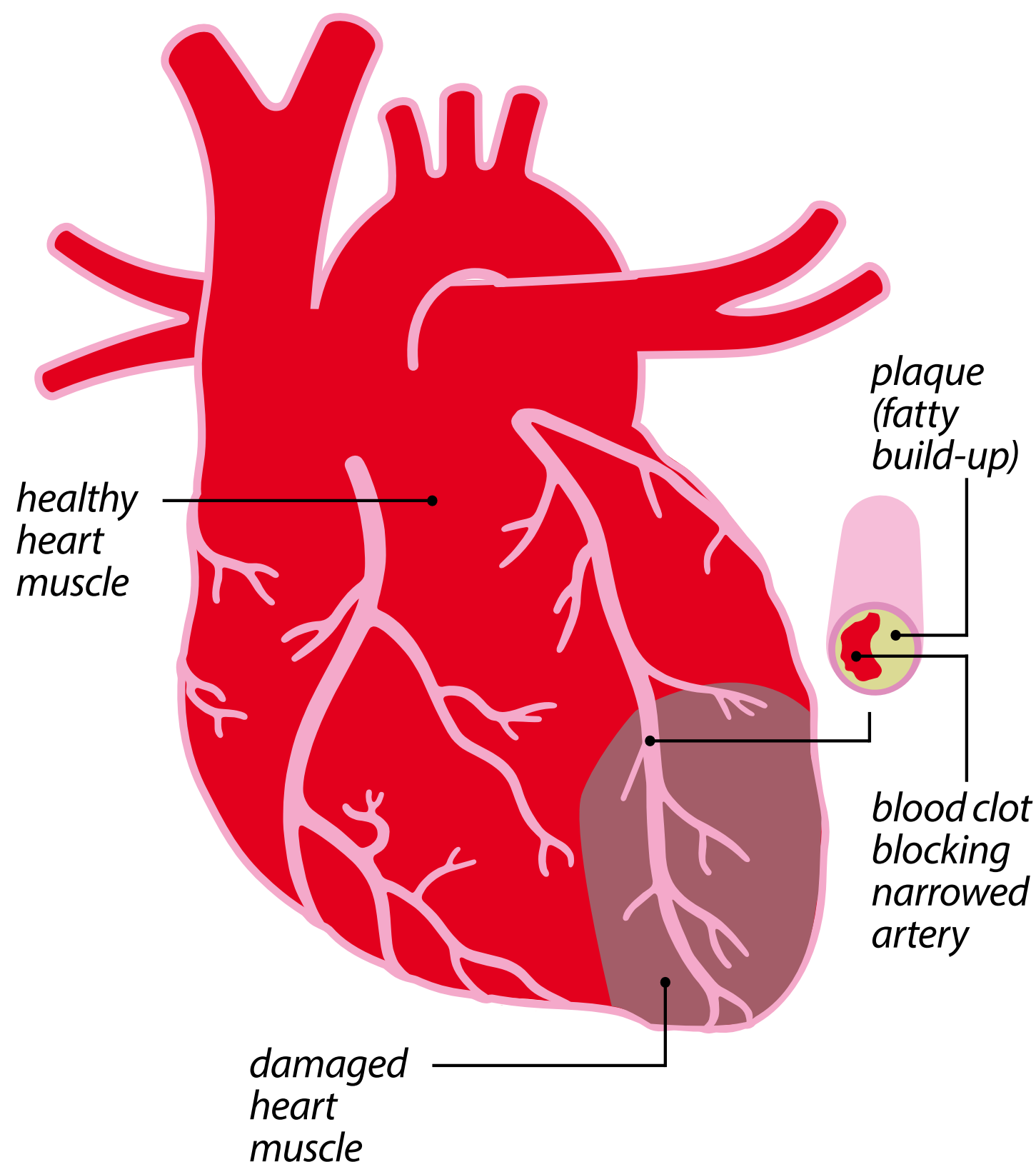
A heart attack happens when a sudden blockage in one of your coronary arteries reduces the blood flow to your heart muscle. It usually causes pain or discomfort in your chest, and it may cause other symptoms (see page 04).

### What causes a heart attack?

A heart attack is nearly always caused by **coronary heart disease**. This condition is the result of fatty deposits called **atheroma** building up in your artery walls, causing the artery to become narrower. This fatty build-up is called a **plaque**.

If a plaque cracks, a blood clot can form which can block your artery completely, starving part of your heart of blood and oxygen. If this happens, that part of your heart will begin to die. This is a **heart attack**.

### A blocked artery can damage your heart



To watch an animation of what causes a heart attack, visit [bhf.org.uk/heartattack](https://www.bhf.org.uk/heartattack)

## WHAT HAPPENS TO MY HEART AFTER A HEART ATTACK?

A heart attack causes some permanent damage to your heart, but the sooner you have treatment, the less that damage will be. Most people still have good health and a good quality of life after a heart attack.

If a heart attack does significant damage to your heart, the heart's pumping action can be affected. This can lead to **heart failure**, a condition which can cause symptoms such as breathlessness, tiredness and swollen ankles. You can find more information in our booklet *Heart failure*.

Some people continue to feel pain or discomfort in their chest, known as **angina**, after they've been treated for a heart attack. This can be because the heart is recovering. It's perfectly normal and usually goes away after a few days. Some people describe it as a bruised feeling inside their chest.

You may also feel pain or discomfort because of another narrowing in one or more of your coronary arteries, caused by coronary heart disease (see page 06). Sometimes this is called 'by-stander disease' and it may need treatment. Your doctors will discuss this with you.

## LEADING THE FIGHT...

### against heart attacks

The BHF is the largest independent funder of cardiovascular research in the UK. Our research has helped make sure that at least 7 out of 10 people survive a heart attack in the UK. Some other highlights of our research into heart attacks include:

- 1 Developing better blood tests to help detect a protein that leaks from the heart after damage. In the future, this may help to diagnose heart attacks sooner in people with chest pain.
- 2 Discovering new ways to repair heart muscle that's been damaged as a result of a heart attack. This is known as regenerative medicine and includes looking at how stem cells can be used to help repair damaged heart muscle.

Our life saving research is powered by your support. If you'd like to make a donation, please see the inside front cover for more details.



For more information on the BHF's research into heart attacks, see [bhf.org.uk/HAresearch](https://bhf.org.uk/HAresearch)

Unfortunately there is no cure for coronary heart disease, but treatment can help to relieve your symptoms, protect your heart and reduce your risk of having another heart attack.

Contact your GP if:

- you feel suddenly short of breath or if you notice any new swelling of your ankles
- you get any new symptoms after your heart attack, or
- you get angina after having treatment, although your doctor said this wouldn't happen.

You may have been told that you have **acute coronary syndrome** (ACS). This term describes any condition caused by a sudden reduction in the flow of blood to the heart, including a heart attack. If you have ACS as a result of angina, you can find more information in our booklet *Angina*.

A suspected heart attack is treated as an emergency because of the possible damage to your heart. Early treatment can limit that damage and save your life.

The ambulance team will first:

- take an electrocardiogram (**ECG**, see below) to find out if you could be having a heart attack
- reduce your pain or discomfort, and relieve the strain on your heart
- start treatment to reduce or prevent damage to your heart, and
- resuscitate you if you go into **cardiac arrest** (see pages 16-17). A cardiac arrest can be triggered by a heart attack.

### ECG

When the ambulance arrives, the ambulance team (paramedics) will do a test called an electrocardiogram (**ECG**) to try to find out if your symptoms are due to a heart attack. This has to be done quickly so that it doesn't delay your transfer to hospital.

The test involves putting small sticky patches called electrodes on your arms, legs and chest. These are connected by wires to a machine which records the electrical impulses in your heart that make it pump. The paramedics are able to diagnose if you're likely to be having a heart attack from specific changes that are seen on your ECG results.

You may hear the paramedics use the terms '**STEMI**' or '**NSTEMI**', or see these on your hospital discharge notes. These terms are used to describe the type of heart attack you've had and will help the doctors decide what treatment you need.

### **Pain relief**

To reduce your pain, the paramedics may give you:

- **morphine** (a painkiller), given through a vein (intravenously)
- **glyceryl trinitrate** (GTN), given as a spray under your tongue, which helps to relax and widen your arteries and may help to relieve your chest pain or discomfort.

### **Other medicines**

The ambulance staff will also give you aspirin unless they know you're allergic to it or can't take it for another reason, or you've already taken enough aspirin while waiting for the ambulance. They may also give you another medicine similar to aspirin, such as clopidogrel.

In rare cases the ambulance staff may give you **thrombolysis**, a medicine used to dissolve the blood clot that's blocking your coronary artery and so restore the blood flow to your heart.

You may need thrombolysis if you live in a remote area and it will take more than two hours to reach a hospital that can carry out the ideal treatment.

For an example of a typical route from heart attack to recovery, see page 15.



## Getting you to hospital

If you've had a heart attack, you'll need urgent treatment to:

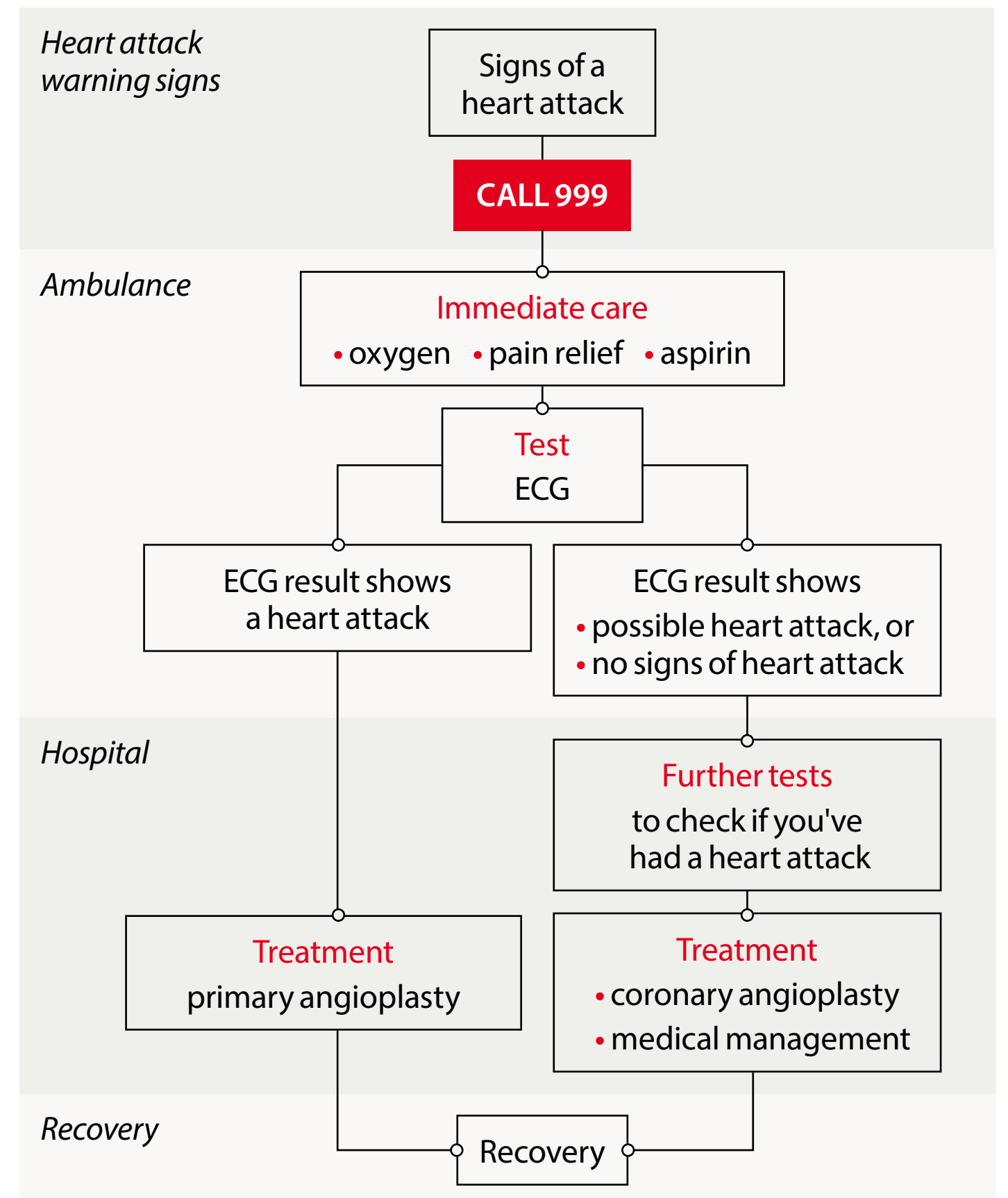
- get the blood flowing again to the damaged part of your heart as quickly as possible, and
- limit permanent damage to your heart.

## Deciding which hospital to take you to

Many people having a heart attack benefit most from a treatment known as primary angioplasty (see pages 18-21), but only if it can be carried out very soon after the symptoms start.

The ambulance service works closely with local hospitals so that people with a suspected heart attack are taken to a unit that can carry out a primary angioplasty. This may be the nearest hospital with a specialist cardiac centre rather than your local hospital.

## From heart attack to recovery



During a heart attack, there's a risk of developing a dangerous heart rhythm which can be life-threatening and can sometimes lead to a cardiac arrest. A **cardiac arrest** is when a person's heart stops pumping blood around their body and they become unconscious and stop breathing, or stop breathing normally.

The most important thing you can do to help save a person's life is to **call 999** and start **CPR** – **cardiopulmonary resuscitation**. For more information on CPR, see pages 56-60.

A person who is having a cardiac arrest may develop a dangerously fast heart rhythm which can be fatal. It's sometimes possible to shock the heart back into a normal heart rhythm by giving **defibrillation**. This means giving the heart an electrical shock using a defibrillator.

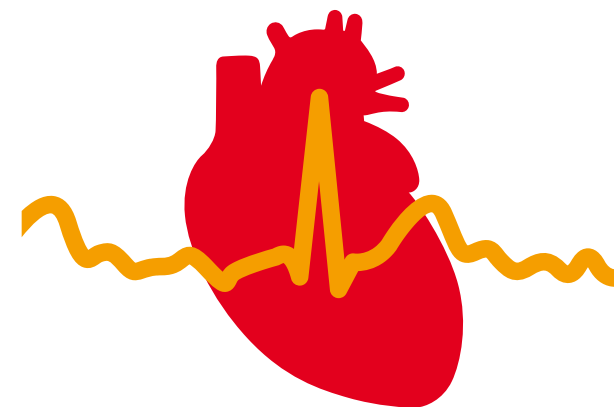
The paramedics or ambulance staff will have a defibrillator with them, but you can also use **public access defibrillators** – or **PADs** for short – found in many workplaces, shopping centres, train stations,

leisure centres and village halls. It's very easy to use a PAD. The machine gives clear, spoken instructions and you don't need training to use one.

Once switched on, the PAD will instruct you on how to attach the pads, whether or not a shock is needed and how to deliver it.

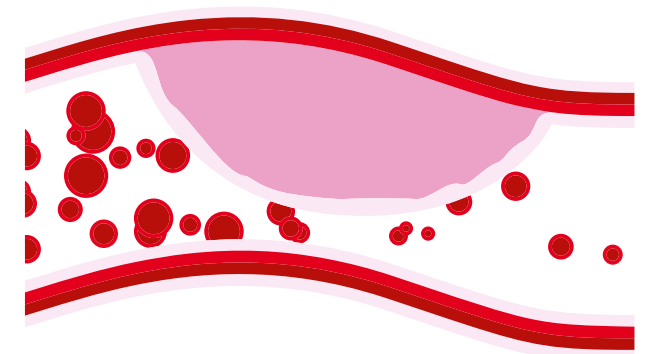
Find out where the PADs in your local area are. For more information, go to [bhf.org.uk/defibs](https://www.bhf.org.uk/defibs)

**CARDIAC ARREST** is an **ELECTRICAL** problem



The person will be **UNCONSCIOUS**  
■ Call 999 ■ Start CPR

**A HEART ATTACK** is a **CIRCULATION** problem



The person will probably be **CONSCIOUS**  
■ Call 999 ■ Keep them calm

If your ECG shows that you're having a heart attack, you'll be taken straight to the hospital's cardiac catheterisation laboratory, or 'cath lab' for short, which deals with heart tests and treatments. Here the staff will prepare you for your primary angioplasty.

Angioplasty aims to re-open a blocked coronary artery. When an angioplasty is used to re-open a coronary artery in someone who's having a heart attack, it's called a **primary angioplasty**, (or sometimes primary PCI or PPCI). PCI stands for percutaneous coronary intervention.

### Primary angioplasty

Before your primary angioplasty, your doctors will look at your coronary arteries to see where the blockages are and how severe they might be. This test is known as an **angiogram** and it's an important part of your treatment. You'll be given a local anaesthetic in your wrist or your groin. A cut is then made and a fine, hollow tube, known as a catheter, is passed into one of your arteries and up into your heart. Dye is injected into the catheter so that your coronary arteries show up on an X-ray. The doctor will pass the catheter into your

coronary arteries and look at the affected artery (or arteries) to find the blockage.

Another catheter with a small inflatable balloon on the end is then passed into that artery until the tip is inside the blockage (see the diagram on page 20).

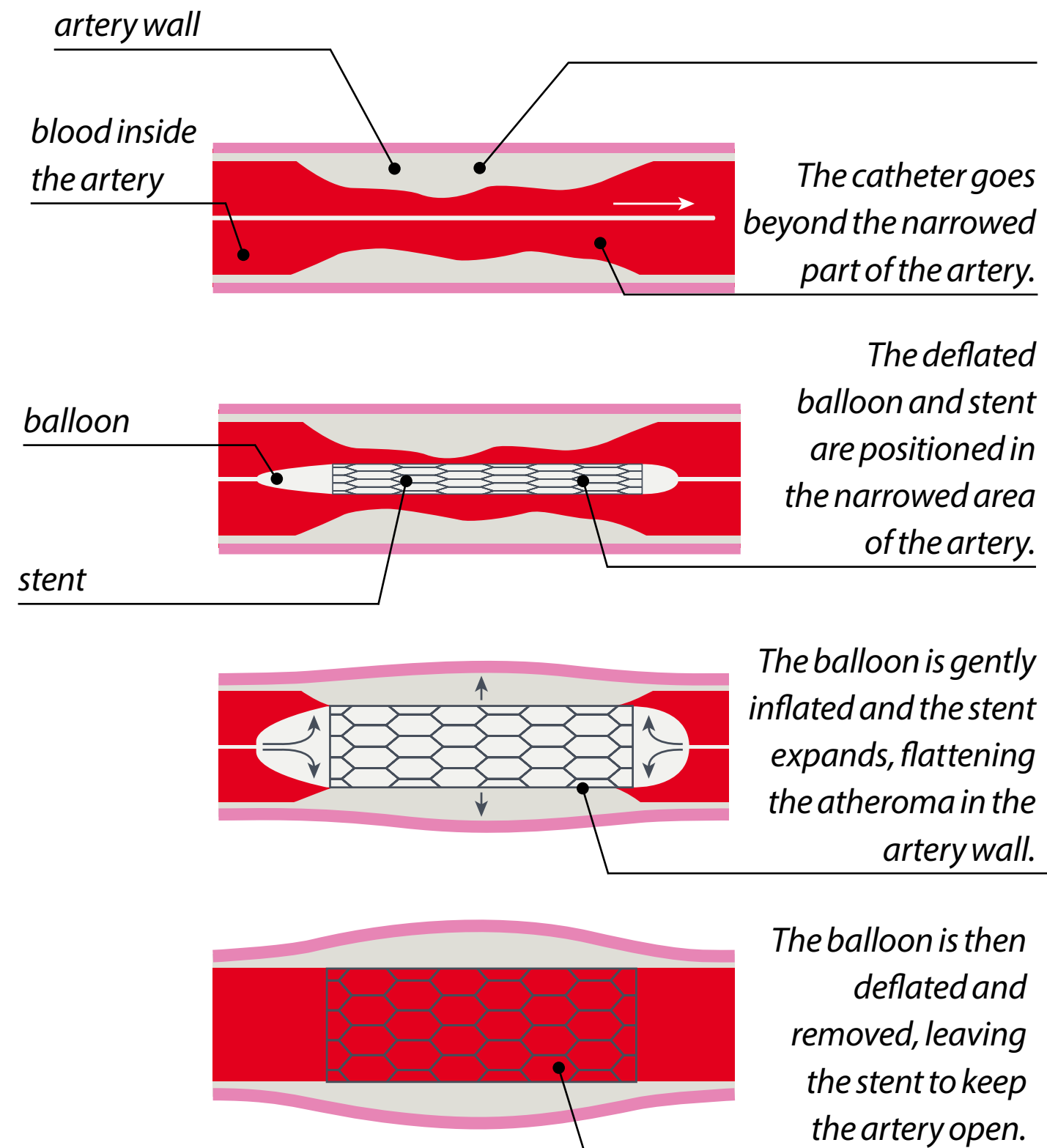
The balloon is then gently inflated, squashing the fatty tissue (atheroma) that's causing the blockage against the artery walls. This re-opens the artery, allowing the blood to flow through more freely to your heart muscle.

A short tube made of stainless steel mesh, known as a **stent**, is nearly always inserted into the widened artery at the same time. This is in position on the balloon when the catheter goes into your artery and it expands when the balloon is inflated. When the blockage is cleared, the balloon is then deflated and removed along with the catheter. The stent stays in place for the rest of your life, helping to hold your artery open.



For more information on this procedure, see our booklet **Coronary angioplasty** or visit [bhf.org.uk/angioplasty](https://www.bhf.org.uk/angioplasty) to watch a video of this treatment.

## Primary angioplasty with a stent



## Medicines

When you're in the cath lab, you may be given several other medicines to prevent further blood clots forming in your heart during the angioplasty. You may also be given these medicines through a drip during the 24 hours after your angioplasty.



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# PAUL'S STORY

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It was a normal Friday in 2008 when Paul developed pain in the left side of his chest.

"I really can't describe the pain, it was unlike anything I'd experienced but it was very severe. I really didn't think it was anything to do with my heart - I'd been perfectly fit and well beforehand with absolutely no symptoms. When the pain didn't go away, I went to our local hospital. In A&E the pain got worse and I was taken to the Cardiac Care Unit. I was told I'd had several heart attacks.

I had an angioplasty and two stents inserted into my left coronary artery. Although I recovered from the angioplasty, I felt tired and experienced chest discomfort from time to time. A year later, I had a second angioplasty because one of my stents had become blocked. After that I made a much quicker recovery. I'm now back to full strength and enjoying life. My wife and I regularly walk on the Yorkshire Moors and at the coast – we can easily walk up to 18 miles over a weekend."

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## Medicines

After a heart attack, you'll need to start taking medicines every day. If you had a heart condition before your heart attack, you may already be taking some or all of these medicines:

- **ACE (angiotensin-converting enzyme) inhibitors** or **ARBs (angiotensin receptor blockers)** – help make your blood vessels relax and widen. This lowers your blood pressure and improves the blood flow to your heart.
- **Antiplatelets** – help make your blood less 'sticky', reducing the risk of blood clots forming. You may be given two types of antiplatelet medicine, one of which is usually **aspirin**. This is known as dual antiplatelet therapy (or DAPT).
- **Beta-blockers** – prevent the heart from beating too quickly and forcefully, and so reduce the strain on your heart.

- **Statins** – reduce the level of cholesterol in your blood and lower the risk of fatty build-up (atheroma) forming in your arteries (see page 06).
- **Glyceryl trinitrate (GTN) spray** – helps to relieve the symptoms of chest pain and discomfort (angina). You'll be prescribed this in case you develop angina after you've been discharged from hospital.

You will need to continue taking these medicines after you leave hospital, and will need to take most of them for the rest of your life. You may also need other medicines, depending on your condition. It's important that you take your medication even if you feel well. The tablets will still be working to help prevent you having further problems.

The main reasons for taking these medicines are to help:

- prevent another heart attack
- protect your stents, if you have any
- reduce your risk factors for coronary heart disease – such as having high cholesterol levels or high blood pressure. (A risk factor is something that increases your chance of getting a disease.)
- prevent or treat the symptoms of angina
- strengthen the pumping action of your heart, and
- reduce the risk of heart failure. This is when your heart is not able to pump blood around your body as well as it should.



For more information on the medicines your doctor prescribes for you, see our booklet **Medicines for my heart**, or visit [bhf.org.uk/medicines](https://bhf.org.uk/medicines). You may also find it helpful to talk to your doctor or pharmacist about your medicines.

If you live in England and buy four or more prescriptions every three months, or 14 or more in a year, it might be cheaper to buy prescription prepayment certificates (PPCs) from the NHS. A PPC lets you have as many NHS prescriptions as you need for a set price.

See [gov.uk/get-a-ppc](https://gov.uk/get-a-ppc) for more details.



## Tests

You may need more tests while you're in hospital to:

- take a closer look at your heart and see how it's working
- check for any more narrowings in your coronary arteries, and
- help decide on the best form of treatment for you.

The tests you'll have may include:

- **ECGs** – More ECGs may be needed to look for any changes in your heart's electrical activity. You'll be attached to a heart monitor for most of the first day to see if you have any heart-rhythm problems that sometimes follow a heart attack.
- **Exercise ECG** (sometimes called a stress test) – An ECG that's done while you're walking on a treadmill or cycling on an exercise bike to see how your heart works when you're more active.
- **Chest X-ray** – A chest X-ray can help show if your heart has become enlarged or if there's fluid around your heart.

- **Echocardiogram** – This is an ultrasound picture of your heart which provides information about your heart's structure, its valves and its pumping action. Sometimes this is done while your heart is under stress by increasing your heart rate with exercise or medication. This is known as a stress echocardiogram.
- **Troponin test** – Your heart normally contains a protein called troponin. If your heart is damaged, for example by a heart attack, troponin leaks into your bloodstream. This test detects any troponin in your blood and so helps to show if there's any damage to your heart. If your test is positive, meaning you have high levels of troponin in your blood, it usually means that you've had a heart attack.



For more information, see our booklet **Tests**, and our DVD **The road ahead - your guide to heart tests and treatments**.



### **Moving to another hospital, ward or unit**

Some people stay in one hospital and then go home. Others have a primary angioplasty in one hospital and then, after a few hours of care, are transferred to their local hospital.

At first you'll be cared for on a specialist unit where you'll receive more extensive care. This is often a coronary care unit (CCU).

You'll be on this specialist unit because you're more likely to develop heart-rhythm problems in the first few hours after your heart attack (see the information about cardiac arrest on pages 17-18). When the doctors and nurses are confident that you're making good progress, you may be moved to a general ward. Here you'll be encouraged to do more for yourself and to move about more, for example walking to the bathroom and around the ward.

### **How long will I need to stay in hospital?**

If you've had a primary angioplasty for a heart attack, you should be able to leave hospital within about two or three days, depending on your condition.

Before you go home, doctors, nurses, other healthcare professionals and sometimes a social worker, will assess your care needs and plan your discharge. You should also be referred to a cardiac rehabilitation service (see page 32).

The hospital will give you a **discharge letter** to give to your GP or they'll send it directly to your GP and give you a copy. This letter has details about:

- your diagnosis
- your hospital treatment
- the medicines you'll need to take, and
- your follow-up appointment.

## Cardiac rehab

When you leave hospital you should be referred to a cardiac rehabilitation service if one is available in your area. It is also known as **cardiac rehab**.

This service offers a broad exercise and health education programme. Everyone's needs are different and the rehab team will be used to dealing with patients with many different heart problems.

Try to accept a cardiac rehab place if you're offered one. If you turn it down, you might not be able to get another one and might regret it.

Cardiac rehab aims to help you recover and resume a normal life as soon as possible. Research shows that it can reduce the risk of dying and can help you to tackle any risk factors linked with coronary heart disease that you might have.



For more information, see our booklets **Cardiac rehabilitation** and **Cardiac rehabilitation - your quick guide**.

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**Everyone's  
needs are  
different and the  
rehab team is used  
to dealing with  
many different  
heart problems**

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It's good to be back home after being in hospital, but you might feel worried when you leave the safe hospital environment where you've been monitored and looked after. It's best to have someone with you at home for the first few days or weeks. This will help to build your confidence.

Take it easy for the first few days. Make sure you have enough rest but do get up, wash and get dressed. Do some light household activities such as making drinks and snacks, going up and down stairs a few times a day, and some gentle walking. If any of this makes you feel unwell, contact your GP. If you're already in contact with a cardiac rehab team, you could speak to one of the staff there.

Get into a routine for taking your medicines and follow the instructions about how and when you should take them. All of your medicines will be listed in the discharge letter you were given when you left the hospital.

If you've been asked to give your discharge letter to your GP then you or a relative or friend should do this as soon as possible. You'll need to make an appointment to see your GP within the first couple of weeks after you return home.

Your GP can:

- monitor your ongoing care and review how you're getting on
- give you your repeat prescription
- change the doses of some of your medication. This is normal, as your GP will want to make sure that your heart is recovering properly and working as well as it can.

A heart attack can be a frightening experience, especially if you've enjoyed good health until then. In hospital, many people feel scared and anxious, sometimes more so because they're in pain and in an unfamiliar environment, surrounded by machines.

Once you're back home, it's normal to worry about being left alone or about what to do if the pain comes back. The people you live with must try not to wrap you in cotton wool, but should let you do what you feel you're able to do. If you feel unsure about what you can do, talk to one of the cardiac rehab team or your GP. Everyone's different and you should get the advice that's right for you.

You'll probably have good days and bad days. Having a heart attack is very stressful and it's both normal and common to feel anxious, panicky and depressed afterwards. Some people worry about having another heart attack or about dying. Or they worry that they won't be able to do as much as before.

You might have problems sleeping, perhaps waking up early in the morning and being unable to get back to sleep. Some medicines can also affect your sleep.

If these feelings continue and you find that anxiety or depression is affecting your quality of life then talk to your GP, practice nurse or one of the cardiac rehab team.

### **Will it happen again?**

Many people wonder if they'll have another heart attack. Having one heart attack does increase the risk of having another but this risk is greatly reduced by the right treatment. If you take the medicines your doctors have prescribed for you and follow a healthy lifestyle, you can significantly reduce your risk. Many people find that going to cardiac rehab gives them confidence and helps them to make the changes needed to lead a healthier life. It will also give you the opportunity to meet other people who have had a heart attack and understand how you feel. For more information on how to have a healthy lifestyle, see page 53.



**It's normal to feel emotional after a heart attack, but you're not alone. For more information, see our booklet **Heart to heart - heart disease and your emotional wellbeing**.**



## Can too much exercise cause another heart attack?

It's natural to feel concerned about exercising after your heart attack. But your heart is a muscle and, like any other muscle in your body, it needs physical activity to keep it in good condition.

While you're in hospital, the nurses, physiotherapists and doctors will advise you about how much, and what type of, physical activity is suitable for you. At first this will be gentle, such as going for short walks if you can. But you'll gradually be able to do more activity for longer as you become stronger and feel more confident.

The advice you're given about physical activity may not be the same as that given to other people who've had heart attacks. This is because everyone is different. After you've left hospital, it's important to continue with the activity that you've been advised to do.



It's important for you, and those around you, to be able to talk about your feelings. For more information, see our booklet **Caring for someone with a heart condition.**

## Facing the future

After your heart attack and during your hospital stay and your recovery at home, you'll have a chance to think about your lifestyle. There may be some things you'll want to change in order to reduce your risk of another heart attack. We explain some of the positive steps you can take on page 53.

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# NICOLE'S STORY

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Nicole had been out with a friend for lunch when she started to have symptoms.

“The café we usually went to was full, so we decided to go elsewhere. Some of the journey was uphill and I suddenly felt very strange. I found it difficult to keep up with my friend. I was feeling nauseous and had an excruciating pain in my left shoulder. A mug of mint tea didn't help and I decided to drive home. After looking up my symptoms online I called my doctor's surgery who told me to come straight in.

After an ECG test they called an ambulance. Everything happened so quickly, and at hospital I was given a stent. I couldn't believe I'd had a heart attack. I just thought, why me? For a while, I couldn't think of anything else. It took time for my brain to catch up, to process such a life-threatening event. I'm thankful that I acted quickly and I can honestly say that I'm not scared anymore. In some ways my heart attack has liberated me. I don't want to waste time, and instead want to live my life to the full.”

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### **Starting cardiac rehab**

You should have been invited to go on a cardiac rehab programme (see page 32), which you can expect to start around a month to six weeks after you get home from hospital. It consists of exercise and information sessions that will help you to get back to everyday life as quickly as possible and keep your heart healthy.

### **Getting active again**

Even after a heart attack, your heart needs physical activity to keep it in good condition. So after cardiac rehab, it's important to continue increasing your activity gradually as the weeks go by. Aim to do a little more each day if you can. As the days and weeks pass, you'll hopefully be able to see the progress you're making. You can start with, for example, some light housework as soon as you feel able. After a few weeks, you may feel well enough for heavier tasks, such as vacuuming.

You can also do light gardening but avoid digging and heavy lifting in the first few weeks.

Start with just a few minutes at a time and build up slowly. If in doubt, ask your cardiac rehab nurse, GP or practice nurse for advice.

Once you've recovered, aim to do some physical activity every day. Many people find that they get tired easily in the first weeks after a heart attack. This is normal and will usually pass as your strength and confidence return.

### **Whatever form of exercise you do ...**

- gradually build up the amount of activity you do
- rest if you feel very tired or breathless, or if you feel chest pain. See your GP if these are new symptoms for you
- avoid activity after a large meal or when the weather is very cold or very hot, or at high altitudes
- if your doctor has prescribed a GTN spray, have it with you when you exercise in case you develop chest pain (see pages 54-55).



## Driving

Your cardiac rehab nurse or cardiac ward nurse will tell you when you'll be allowed to drive again, and whether you need to tell the Driver and Vehicle Licensing Agency (DVLA) about your heart attack.

When you can resume driving will depend on the treatment you've had, how stable your condition is and what type of licence you hold.

If you do need to tell the DVLA about your heart condition or about your treatment, visit [gov.uk/heart-attacks-and-driving](https://gov.uk/heart-attacks-and-driving). Or write to DVLA, Swansea SA99 1TU. You might be asked to complete a medical questionnaire.

## Telling your motor insurance company about your heart condition

Whatever driving licence you hold, you must tell your motor insurance company that you have a heart condition and about any treatment you've had. If you don't, your insurance might not be valid.

## Going back to work

If you have a job, you may need a medical certificate – or 'fit note' – from the hospital or from your GP to give to your employer. This will show that you're unfit to work and detail when you'll be able to return to your job. Usually the hospital will give you a certificate to cover the time you're in hospital, and your GP will give you one to cover the time after that.

The length of time you'll need off work depends on how much damage the heart attack did and the type of work you do.

Your cardiologist (heart specialist), GP and cardiac rehab team will help you to decide when you're fit to return to work. If appropriate, your employer may allow you to go back to work on a 'phased return' basis, so that you can gradually build up your confidence and strength.

Cardiac rehab (see page 32) can increase your chance of successfully returning to work.



For more information, see our booklet **Returning to work with a heart condition.**



# TOP TIPS...

## To follow after your heart attack

- 1** It's normal to feel fear, worry and anxiety after a heart attack. Talk to your doctor about how to deal with these feelings – there's help available.
- 2** Keep a list of the names of each medicine you take, the dose, and when you need to take it.
- 3** Read the information that comes with your medicines to find out why you need to take them, how to take them safely and any side effects to look out for.
- 4** Attend your cardiac rehab programme. It can help speed up your recovery and give you the chance to meet others with a heart condition and to get back to everyday life.
- 5** Make lifestyle changes to help reduce your risk of future heart problems – eating healthily, stopping smoking and staying active will all help keep your heart healthy.

### Sex

People with heart disease and their partners are often understandably anxious about how sex might affect their heart. However, most people can return to having sex after a heart attack. Like any other physical activity, sex can temporarily increase the heart rate and blood pressure. This, in turn, increases the heart's workload. In people with coronary heart disease this can occasionally lead to breathlessness or chest pain. However, sex is just as safe as other equally energetic forms of physical activity.

Both men and women can lose their sex drive or experience sexual dysfunction after a heart attack. Sexual dysfunction is when it's difficult to have sex – for example, a man being unable to have or maintain an erection. This might be because of the emotional stress you're feeling or the effect that having had a heart attack is having on your relationship. It can also be the result of taking certain medicines, including beta-blockers, which can affect sex drive, especially in men. Other reasons for sexual dysfunction include having another health condition, such as diabetes.

If you use a GTN spray (see page 25) or take a type of medication known as nitrates, you should not take a group of drugs known as PDE-5 inhibitors, which includes Viagra.

## Alcohol

During the first weeks after your heart attack, it's best to limit the amount of alcohol you drink. Alcohol may affect how your medicines work, so first ask your doctor how much is safe for you to drink.

If you drink alcohol it's important to keep within the guidelines:

- Men and women shouldn't drink more than 14 units of alcohol each week.
- You should have several alcohol-free days each week.
- If you drink as much as 14 units a week, spread this out evenly over three days or more.

These guidelines apply whether you drink regularly or only occasionally.

### 1 unit of alcohol =



- a small glass (100ml) of wine (10% ABV [alcohol by volume])
- or a pub measure (25ml) of spirits
- or half a pint (about 300ml) of normal-strength lager, cider or beer (for example, 3.5% ABV).

## Air pollution

It is important to be aware that being exposed to high levels of air pollution can make existing heart conditions worse. The level of air pollution varies from day to day, depending on the weather and season. Pollution levels are classed as low, moderate, high or very high.

If you have a heart condition, you may want to avoid spending long periods of time in places where there are high levels of air pollution. For example, avoid walking on or near busy roads. For most people, the benefits of exercising outdoors outweigh the risks associated with air pollution, but it is good to be aware of the potential risk.

## Holidays

Most people prefer to wait until they feel fully recovered before going on holiday. Others find that a holiday gives them the chance to relax and unwind, and this helps their recovery.

When you go on holiday, you might want to think about staying in accommodation that's easily accessible and, unless you're fit enough, avoid:

- places at high altitudes
- countries with very hot or very cold climates
- hilly destinations.

## Flying

People who have had a heart attack with no complications can usually fly within a few weeks. But it might be better to travel only if it's essential until you feel fully recovered. Ask your cardiologist, cardiac rehab nurse or GP about when you can fly. It will depend on the overall state of your health and how well you're recovering.

When flying, check if you need to tell your airline about your condition and give yourself plenty of time at the airport before your flight so you don't have to rush.

## Medicines and travel insurance

Before your trip, make sure you:

- pack enough medicines for your entire trip
- keep some of your medicines in your hand luggage
- take an up-to-date list of all your medicines in case you lose any
- take a summary of your medical conditions and any allergies you may have
- make sure you have travel insurance. For a list of insurers, see Insurance on page 52.

## Insurance

If you have a problem finding insurance, the BHF has details of companies that have been recommended to us by heart patients and offer travel, life and car insurance. You can get the list directly from our website at [bhf.org.uk/insurance](https://www.bhf.org.uk/insurance) or you can call the Heart Helpline on **0808 802 1234**, or write to us at the address on the inside front cover.

## Carers

Caring for someone who's had a heart attack can be physically and emotionally draining. While at times caring can be difficult and stressful – for both you are the person you are caring for – it can also be immensely rewarding. But it's really important that you take the time to look after yourself too.



For information for carers, see our booklet **Caring for someone with a heart condition**.

## HOW CAN I REDUCE MY RISK OF FURTHER HEART PROBLEMS?

It's vital to keep your heart healthy after your heart attack. This will help to reduce your risk of any future heart problems.

These points are all very important:

- if you smoke, **stop smoking**
- keep physically active
- keep to a healthy weight and body shape
- keep your cholesterol level and your blood pressure under control. It's important to have these checked regularly at your GP surgery
- eat a healthy balanced diet, including at least five portions of fruit and vegetables a day and one portion of oily fish a week – for example, herring, mackerel, pilchards, sardines, salmon or trout
- if you have diabetes, make sure you control your blood glucose level.



For more detailed information about all of these, see our booklet **Cardiac rehabilitation**, and our other booklets and resources (see pages 62-63).



## WHAT TO DO IF YOU GET CHEST PAIN

This information is for people who already have coronary heart disease and who are taking GTN (glyceryl trinitrate) spray (or tablets) for their angina symptoms.

As you already have coronary heart disease, you may have chest pain or discomfort from time to time. Sometimes this will be angina, which you'll be able to manage at home with your GTN. But it could also be a symptom of a heart attack.

## IF YOU GET CHEST PAIN...

- 1** Stop what you are doing.
- 2** Sit down and rest.
- 3** Use your GTN spray or tablets. Take the GTN as your doctor or nurse has told you. The pain should go away within five minutes. If it doesn't, take your GTN again.
- 4** If the pain has not gone away within five minutes of taking the second dose of GTN, call 999 immediately.
- 5** Chew an adult aspirin tablet (300mg) if there is one easily available, unless you're allergic to aspirin or have been told not to take it. If you don't have an aspirin next to you, or if you don't know if you're allergic to aspirin, just stay resting until the ambulance arrives.

If you have symptoms that do not match the ones we have described previously but you think that you are having a heart attack, call 999 immediately.

# CALL PUSH RESCUE

If someone has had a cardiac arrest, they will be unconscious, and either not breathing or not breathing normally. The person needs immediate help or they will die within minutes.

**First** check that it is safe to approach the person.

To find out if the person is conscious, gently shake him or her, and shout loudly, 'Are you all right?' If there is no response, the person is unconscious.

You will need to assess the person's **airway** and **breathing**.



Open the person's airway by tilting their head back and lifting their chin.

Look, listen and feel for signs of normal breathing. Only do this for up to ten seconds. Don't confuse gasps with normal breathing. If you're not sure if their breathing is normal, act as if it is not normal.

Now remember: **Call Push Rescue**

# CALL...

**Call for help.**

If the person is unconscious and is either not breathing or not breathing normally, they are in cardiac arrest.

**Call 999 immediately.**

- Send someone else to call 999 for an ambulance while you start CPR.
- **Or, if you are alone with the person, call 999 before you start CPR.**



# PUSH...

Push hard and fast on the centre of the chest.



Start chest compressions.

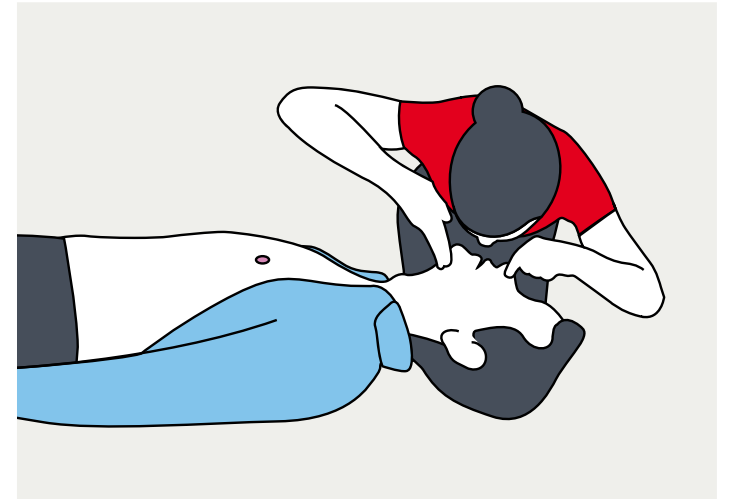
- Place the heel of one hand in the centre of the person's chest.
- Place the heel of your other hand on top of your first hand and interlock your fingers.

- Press down firmly and smoothly on the chest 30 times, so that the chest is pressed down between five and six centimetres each time. Do this at a rate of about 100 to 120 times a minute. That's about two each second.

# RESCUE...

Give rescue breaths.

After 30 compressions, open the airway again by tilting the head back and lifting the chin, and give two of your own breaths to the person. These are called rescue breaths.



To do this, pinch the soft parts of the person's nose closed. Take a normal breath, make a seal around their mouth with your mouth, and then breathe out steadily. The person's chest should rise and fall with each breath. It should take no more than five seconds to give the two rescue breaths.

Then give another 30 chest compressions and then two rescue breaths.

Keep doing the 30 chest compressions followed by two rescue breaths until:

- the ambulance crew arrives and takes over, or

- the person starts to show signs of regaining consciousness, such as coughing, opening their eyes, speaking, or moving purposefully **and** starts to breathe normally, or
- you become exhausted.

### **If you prefer not to give rescue breaths**

If you'd rather not give rescue breaths, call 999 and then deliver **hands-only CPR**. Keep doing the chest compressions – at a rate of about 100 to 120 times a minute.

For more on this, see [bhf.org.uk/handsonly](https://www.bhf.org.uk/handsonly)

## **FOR MORE INFORMATION**

### **British Heart Foundation website** **bhf.org.uk**

For up-to-date information on cardiovascular disease, the BHF and its services.

### **Genetic Information Service** **0808 802 1234**

(Freephone) For information and support on inherited heart conditions.

### **Online community** **healthunlocked.com/bhf**

Share your experiences, stories, tips and ideas with other people like you in our online community.

### **Heart Helpline** **0808 802 1234**

(Freephone)

For information and support about your heart condition and keeping your heart healthy.

### **Twitter** **@TheBHF**

Get our latest news and views directly into your Twitter feed.

### **Facebook** **facebook.com/bhf**

Join the conversation and get our latest news and updates on Facebook.



## Booklets and DVDs

To order our booklets or DVDs:

- call the BHF Orderline on **0300 200 2222**
- email **orderline@bhf.org.uk** or
- visit **bhf.org.uk/publications**

You can also download many of our publications from our website.

Our resources and services are free of charge, but we rely on donations to continue our vital work. If you'd like to make a donation, please call our donation hotline on **0300 330 3322** or visit our website at **bhf.org.uk/donate**

## Heart Information Series

This booklet is part of the *Heart Information Series*. The booklets in this series are:

- Angina
- Atrial fibrillation (AF)
- Blood pressure
- Cardiac rehabilitation
- Caring for someone with a heart condition
- Coronary angioplasty
- Diabetes and your heart
- Heart attack
- Heart failure
- Heart rhythms
- Heart surgery
- Heart transplant
- Heart valve disease
- Implantable cardioverter defibrillators (ICDs)
- Keep your heart healthy
- Living with a pacemaker
- Medicines for my heart
- Peripheral arterial disease
- Reducing my blood cholesterol
- Returning to work
- Tests

## Our services

For more information about any of our services, contact the BHF on **0300 330 3322** or visit **bhf.org.uk**

## Nation of life savers

The BHF has a vision to create a nation of life savers. As part of that vision, we're doing everything we can to make sure the UK public know CPR and can use public access defibrillators. Join the fight for every heartbeat and help us save the lives of thousands of people across the UK every year. Find out more at **bhf.org.uk/cpr**

- **Heartstart** is a free, two-hour course where you can learn CPR and other emergency life saving skills.
- Our **Call Push Rescue** training kit is available free to eligible secondary schools, and for a small fee to workplaces and community groups. It has everything you need to learn CPR, including a training DVD.

## Heart Matters

Heart Matters is the BHF's free, personalised service offering information to help you lead a heart-healthy lifestyle. Join today and enjoy the benefits, including *Heart Matters* magazine and access to online tools. Call the **Heart Matters Helpline** on **0808 802 1234**, or join online at **bhf.org.uk/heartmatters**

## Heart Support Groups

Local Heart Support Groups give you the chance to talk about your own experience with other heart patients and their carers. They may also include exercise classes, talks by guest speakers, and social get-togethers. To find out if there is a Heart Support Group in your area, contact the **Heart Helpline** on **0808 802 1234**.

## Help shape the BHF – Heart Voices

Heart Voices is a growing network of heart patients who use their experiences to make sure our work meets the needs of patients. By signing up, you'll get the chance to shape the BHF by getting involved with anything from helping us to make new resources to informing our research. Visit **bhf.org.uk/heartvoices** for more information and to sign up.

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## HAVE YOUR SAY

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We would welcome your comments to help us produce the best information for you. Why not let us know what you think? Contact us through our website **bhf.org.uk/contact**. Or, write to us at:

BHF Customer Services  
Compton House  
2300 The Crescent  
Birmingham Business Park  
Birmingham B37 7YE

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# THANK YOU

This booklet is part of the *Heart Information Series*. We distribute 2 million booklets from this series each year. Without your hard work and support the British Heart Foundation wouldn't be able to provide this vital information for people with heart conditions.

Donate to the fight at **bhf.org.uk/donate**

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For over 50 years our research has saved lives.

We've broken new ground, revolutionised treatments and transformed care.

But heart and circulatory disease still kills one in four people in the UK.

That's why we need you.

With your support, your time, your donations, our research will beat heart disease for good.

**FIGHT  
FOR EVERY  
HEARTBEAT**

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