Heart attack

A heart attack is a medical emergency and you should call 999 for an ambulance immediately. It happens when there’s a sudden loss of blood flow to a part of the heart muscle. Without enough blood and oxygen your heart can be seriously damaged.

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Symptoms of a heart attack

Heart attack symptoms vary from person to person. They can include:

* pain or discomfort in your chest that happens suddenly and doesn't go away
* pain that spreads to your left or right arm, or to your neck, jaw, back or stomach. For some people the pain or tightness is severe, while for others it’s uncomfortable. It may feel like heaviness, or a burning pain similar to indigestion
* feeling sick, sweaty, light-headed or short of breath.

Other less common symptoms include:

* a sudden feeling of anxiety that can feel similar to a panic attack
* lots of coughing or wheezing due to a build-up of fluid in the lungs.

It’s possible to have a heart attack without experiencing all these symptoms, and it’s important to remember everyone experiences pain differently. This is more likely in elderly people or people with diabetes, as the condition can cause nerve damage which affects how you feel pain.

Discomfort in the chest can be caused by many things from a heart attack to indigestion and muscle strain.

What should I do if I think I'm having a heart attack?

It’s important you get medical attention immediately. Do not worry about wasting paramedics’ time, a heart attack is a medical emergency.

You should:

* call 999 for an ambulance
* sit down and stay calm
* take 300mg aspirin if you have it and you're not allergic
* wait for the ambulance.

What causes a heart attack?

Most heart attacks are caused by coronary heart disease (CHD).

CHD causes your coronary arteries to become narrowed by a gradual buildup of fatty deposits called atheroma.

If a piece of atheroma breaks off, a blood clot forms around this to try and repair the damage to the artery wall. This clot can block your coronary artery, causing your heart muscle to be starved of blood and oxygen.

Other less common causes of a heart attack include:

* spontaneous coronary artery dissection (SCAD) which is when a tear appears in the wall of one of your coronary arteries
* using harmful drugs like cocaine and amphetamines (speed)
* hypoxia (a sudden drop in oxygen levels in the body).

Although symptoms can vary from person to person, women and men generally experience the same heart attack symptoms. However, research shows women do not recognise the symptoms as a sign of a heart attack as quickly. This is mainly because heart attacks are wrongly believed to be a “man’s problem."

In the UK, an average of four women die of coronary heart disease every hour, many of them due to a heart attack.

You dramatically increase your chance of survival if you call 999 straight away.

How is a heart attack diagnosed?

If you think you’re having a heart attack, you need to call 999 for an ambulance. Do not try and take yourself to hospital, as the ambulance team will give you the best care and do tests on the way.

In the ambulance, the team will do an electrocardiogram (ECG) to measure the electrical activity of your heart. This is an important test to find out if you're having a heart attack. If the ECG shows you’re having a heart attack, you’ll be taken to a specialist centre to get the best treatment.

Whether or not the ECG confirms a heart attack, you’ll need further tests to find out what’s going on. These tests may include:

* an assessment of your symptoms and medical history
* physical examinations, including measuring your blood pressure and monitoring your heart rhythm and heart rate
* blood tests to see if there’s been any damage to your heart muscle
* more ECGs
* an echocardiogram (an ultrasound of your heart).

How is a heart attack treated?

Quick treatment to get the blood flowing to your heart muscle again is important. This can reduce the amount of permanent damage to your heart and save your life.

Many people need to have emergency treatment to restore the blood flow. Emergency treatment may include:

* Coronary angioplasty, putting one or more stents (which are like small pieces of scaffolding) into the narrowed or blocked artery to keep it open and improve the blood supply to the heart.
* Thrombolysis, involves giving you "clot-busting" medicine to dissolve the blood clot that's blocking the coronary artery.
* Coronary bypass surgery, helps to bring back normal blood flow by attaching a blood vessel from your leg, arm or chest in your heart to go around the blocked artery.

You’ll discuss with your doctor which of these treatments might be best for you.

Recovering from a heart attack in the hospital

You'll usually stay in hospital for about two to five days after having a heart attack. This depends on what treatment you've had and how well you're recovering.

* If you’ve had coronary angioplasty or stents, it’s likely you'll stay in hospital for two or three days.
* If you’ve had coronary bypass surgery, it’s likely you'll stay in hospital for at least a week.

During your stay, you’ll be monitored and have tests to see how well your heart is recovering.

When you first arrive in hospital, you’ll likely be admitted to a coronary care unit which is for people with serious heart issues who need to be closely watched. During your stay, you might be moved to a cardiac ward.

You will not be discharged (sent home) from hospital until your doctor is certain you’re well enough to go home. To decide this, they’ll talk to you about going home and do assessments such as have you climb stairs to see if you’re fit enough.

Recovering from a heart attack at home

When you get home, it’s a good idea to gradually build up how much you do. Even if you do not feel like it, many people find getting up, washing and dressing a positive first step.

Over time, you can do some light household activities like making a hot drink or get back into the habit of doing the usual things like the washing up. Walking around the house or standing up from the chair and marching on the spot for a minute is another way of keeping active.

You might find it helpful to have someone stay with you for the first few days or weeks once you return home. If it’s not safe for you to be discharged from the hospital on your own, you may be able to stay longer.

You can speak to your team about going home as soon as possible and they can help you get support like a small, temporary package of care or special equipment at home if you need it.

A heart attack can be a frightening experience and it can take time to come to terms with what's happened. It’s natural to be worried about your recovery, feel scared, frustrated and isolated.

Cardiac rehabilitation

After a heart attack, you’ll be offered cardiac rehabilitation (cardiac rehab for short). Cardiac rehab gives you the best chance of recovery by offering:

* guidance from experts
* exercise sessions
* regular assessments
* the chance to meet people going through a similar experience.

Cardiac rehab is an important step that guides and supports you on your journey to recovery. Talk to your healthcare team about how you can start a cardiac rehab programme.

What medications will I have to take after a heart attack?

It’s essential that you take any medication that’s been prescribed even if you feel well. Medications may include:

* Antiplatelets like clopidogrel or ticagrelor are commonly prescribed for one year to reduce the chance of you having another heart attack. Most people are also prescribed lifelong aspirin.
* ACE inhibitors or angiotensin receptor blockers (ARBs) such as ramipril or losartan are prescribed to treat heart failure and high blood pressure.
* Beta blockers like bisoprolol help control your heart rate and can also help lower blood pressure. This helps to reduce the workload of the heart so that it can recover.
* Statins like atorvastatin reduce the level of cholesterol in your blood and protect the insides of your arteries.
* Glyceryl trinitrate spray helps reduce chest pain which can happen after a heart attack.

If you have any questions, concerns or are worried about side effects from your medication, do not stop taking it and talk to your doctor. If your symptoms are serious, speak to your GP or pharmacist straight away.

If you notice some side effects but they’re not too bad, it can help to keep a diary of your symptoms before you talk to your doctor so they can help you manage. Another option is to use the New Medicine Service through the NHS to get extra help and advice if you’re prescribed medicine to treat a long-term condition.

How can I reduce my risk of having a heart attack?

There are many things you can do to be healthier and reduce your risk, like:

* keeping active, which has been proven to boost energy, sleep and quality of life
* maintaining a healthy weight and diet, this will help your overall health and prevent extra strain on your heart
* limiting how much alcohol you drink (less than the recommended 14 units per week)
* stopping smoking and using other tobacco products
* controlling high blood pressure, cholesterol levels and blood sugar levels (if you have diabetes).

There are also some risk factors you cannot control, such as:

* family history, if family members have had heart or circulatory disease, you might have a higher risk of getting conditions that can lead to heart attack or stroke
* getting older, your ethnic background and your assigned sex at birth all effect your chances of getting a heart condition
* a previous heart attack.

Everyone aged between 40 to74 is eligible for a free NHS Health Check in England. If you have a family history of heart and circulatory disease, it’s important to let your GP know and arrange a health check. Similar schemes are available in Wales, Scotland and Northern Ireland. Contact your GP to find out more.