



British Heart
Foundation

Cardiac rehabilitation speeded my recovery

Chris Elks

**FIGHT
FOR EVERY
HEARTBEAT**
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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.

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- visit **bhf.org.uk/donate** or
- post it to us at BHF Customer Services, Lyndon Place, 2096 Coventry Road, Birmingham B26 3YU.

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CONTENTS

About this booklet	02
What is cardiac rehabilitation?	03
What is coronary heart disease?	06
The first few weeks after leaving hospital	12
What can I expect from my cardiac rehab programme?	27
How can I reduce my risk of further heart problems?	38
What to do if you get chest pain	58
Heart attack?	
The symptoms ... and what to do	60
Cardiac arrest?	
The symptoms ... and what to do	62
For more information	69
Index	74
Have your say	75

This booklet is for people who have been in hospital with a heart condition, or who have had a procedure or treatment for their heart condition. It tells you how cardiac rehabilitation can help you to get back to as full a life as possible. The booklet will also be useful for your family, friends or carers.

This booklet explains:

- what cardiac rehabilitation is
- who it's for
- what coronary heart disease is, and what causes angina and heart attacks
- how you can help your recovery in the first few days and weeks after going home from hospital
- what happens on a cardiac rehabilitation programme, and
- what you can do to reduce your risk of further heart problems.

This booklet does not replace the advice that your doctors or cardiac rehabilitation team may give you, but it should help you to understand what they tell you.

The aim of cardiac rehabilitation – or cardiac rehab for short – is to help you to recover and get back to as full a life as possible after a cardiac event such as a heart attack, or after having treatment such as coronary bypass surgery or coronary angioplasty. It's as much a part of your treatment as your medicines are. It also aims to give you the information you need both to look after your heart health and to keep you well in the future.

Who is cardiac rehab for?

You should be offered cardiac rehab if:

- you've had a heart attack
- you've had a coronary angioplasty
- you've had coronary bypass surgery or another type of heart surgery
- you've had an implantable cardioverter defibrillator (ICD) inserted, or
- you have angina or stable heart failure.

For more detailed information about all these heart conditions and treatments, see the list of booklets on page 71.

While you are in hospital

In some hospitals, a member of the **cardiac rehab team** will see you while you are on the ward, to give you information about your condition and the treatment you've had. They can talk to you about your recovery and getting back to your usual activities, about your lifestyle, and about how you can protect your heart in the future. Include your partner or a family member in these conversations if possible.

Who is in the cardiac rehab team?

A cardiac rehab team may include a:

- cardiologist
- cardiac nurse
- physiotherapist
- exercise specialist
- occupational therapist
- dietitian, and
- psychologist.

You may not get to see all of these professionals, but you may see some of them either while you are in hospital or afterwards as an outpatient.

Cardiac rehab programme

You should expect to be invited to go on a cardiac rehab programme, which you can start after you've left hospital and recovered fully after your treatment. We explain more about what the programme involves on page 27.

On the next page, we explain what coronary heart disease is and how it causes angina and heart attacks. This will help you understand why cardiac rehab is so important in keeping your heart healthy.

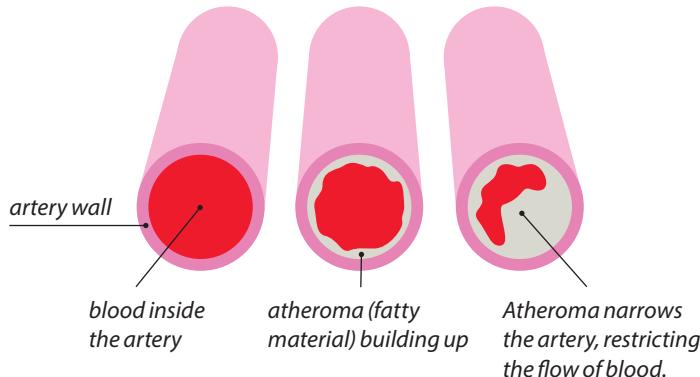


For more information on health professionals and what they do, visit bhf.org.uk/HMwho

Coronary heart disease occurs when the **coronary arteries** – the arteries on the surface of the heart that supply the heart muscle with blood – become furred up with a fatty material called **atheroma**.

Over time, the artery may become so narrow that it can't deliver enough oxygen-rich blood to the heart muscle when it needs it – such as when you're doing exercise. You may get symptoms such as pain or discomfort, because of the poor supply of blood to your heart muscle. This is called **angina**. For more on this, see our booklet *Angina*.

How atheroma builds up



A **heart attack** happens when a narrowed coronary artery becomes blocked by a blood clot. Part of the heart muscle is starved of oxygen and may become permanently damaged. For more information, see our booklet *Heart attack*.

If you've had a heart attack

How long you need to stay in hospital after having a heart attack varies from person to person. Every heart attack is a serious event, and taking part in a cardiac rehab programme is very important for everyone – however long you've stayed in hospital for.

Tests and treatment

If you have angina or if you've had a heart attack, you will probably have various tests to decide on the best type of treatment for you. Your doctor may give you medicines, which you will probably need to continue taking in the long term. If the tests show that your coronary arteries are very narrowed, you may need to have a treatment such as a **coronary angioplasty with a stent** or **coronary bypass surgery**.

Sometimes coronary angioplasty is done as a treatment that is planned beforehand, and sometimes it's done as an emergency treatment for a heart attack. If it is done as an emergency treatment for a heart attack, it's called **primary angioplasty** or **PPCI** (primary percutaneous coronary intervention).



For more information on these treatments, see our booklets **Coronary angioplasty** or **Primary angioplasty after a heart attack** or **Having heart surgery**.

What increases the risk of getting coronary heart disease?

A risk factor is something that increases the chances of getting a disease. Risk factors for coronary heart disease include:

- **smoking**
- **high blood pressure**
- **high blood cholesterol**
- **physical inactivity**
- **being overweight or obese**, and
- **having diabetes**.

These are all things that you can do something about. Going to a cardiac rehab programme will give you the support and information you need to make lifestyle changes. This will help to reduce these risk factors and protect your heart in the future. We explain more about what you can do about these risk factors on page 38.

Your risk of getting coronary heart disease also depends on other factors, like your **sex, age, family history** and **ethnic background**. You can't do anything about these four risk factors. However, you'll still benefit a lot from controlling any other risk factors you have.

YVONNE'S STORY

Yvonne's life changed the day she had a heart attack. She was walking into work when she began to feel very unwell.

"I went through the door and all of a sudden it felt as if someone had whacked me in the chest with a sledgehammer. I could hardly breathe. I went to the hospital and found out I'd had a heart attack.

I started to go to the rehab sessions. It was absolutely fantastic. I would go twice a week and do fitness sessions. Everything was timed. I did eight weeks and looked forward to going. If you wanted to go on and do more you could – and I did that. I didn't know the limits of my body after the heart attack, but rehab really helped me get back on track.

I learnt a lot about healthy eating. I now eat breakfast, make healthy sandwiches and salad for lunch. I'm trying to stop smoking too. I'm focusing on the things I can change."



It's normal to worry or feel anxious when you leave hospital and go home. So make sure that you talk to the hospital staff, the cardiac rehab team or your GP about what you can try to do. Everyone is different and you must get advice that's relevant to you. Your family or those close to you may also feel anxious about your recovery and might want to hear the advice you're given.

Recovery time varies greatly depending on your heart condition, any other health issues you may have, and the treatment you've had. People who are older, or have been particularly unwell, might find it takes longer to recover.

In the first few weeks after leaving hospital, you'll have good days and bad days. But, as time goes by, you should improve and gradually feel better.

Some cardiac rehab teams can offer you support in these first few weeks. One of the team members may visit you at home or phone you to see how you are. Or they might offer a helpline service which you can call for advice or information. They could also put you in touch with a local heart support group (see page 73).

The first few days

Everyone is different. So make sure that, before you go home from hospital, you've been given all the information you need, like what sort of activities are right for you.

For the first two or three days at home, it's best to take things easy. Do about the same amount of moving around as you did just before you left hospital. Every day try to get up, wash and dress, do some light activities such as making drinks and light snacks, go up and down the stairs a few times a day if you can, and do some gentle walking.

Rest is also important for your recovery. It's normal to feel tired after a heart attack or heart surgery. If you're feeling tired, make sure that you rest properly on your bed, rather than just dozing in a chair.

If you've had a planned angioplasty with no complications, you may find that you can increase the amount of activity you do more quickly than what we've described above. Be sure to ask your doctor or cardiac rehab team for advice.

Medicines

When you leave hospital, you'll be given a supply of your medicines to take home with you. These medicines may be different from the ones you were taking before you went into hospital. It's important to take your new medicines as prescribed. If you have any questions about your medicines, ask your GP, cardiac rehab team, or pharmacist.

Seeing your GP

It's a good idea to make an appointment to see your GP soon after you get back home from hospital. You can then ask your GP about any concerns you have, and get another prescription for your medicines.

Feelings

It's normal to have mixed emotions after being diagnosed with a heart problem. You may feel relieved that you've had treatment to help improve your heart condition. But you may be concerned that you won't be able to do as much as before, be worried about further heart problems, or feel angry to be living with a heart condition. All this is natural.

You may feel anxious, low, bad-tempered or weepy. It's important to talk about these feelings with your family or friends, the cardiac rehab team, or people at a heart support group. Going to a cardiac rehab programme has been shown to reduce anxiety and depression. If you continue to feel low or depressed, talk to your GP. He or she may be able to provide additional support, such as counselling, or prescribe medicines for you if necessary.

Getting active again

Regular physical activity can help you recover and become independent again more quickly.

The amount of physical activity you can do in the weeks after you get out of hospital will depend on your heart condition, the treatment you've had, and your recovery. Aim to do a little bit more activity each day, and gradually build up how long you exercise for and how often. At first it may seem very tiring, but this is normal. You'll feel less tired as your strength and confidence return.

Walking is an ideal activity to begin with. Try to walk on a flat surface rather than on a hill or steep slope. If the weather is good, walk to your local shop – it will help you to get some fresh air and lift your spirits. It can be helpful if you go walking with a friend or relative at first.

Gradually increase the amount of walking you do over the first two or three weeks after you get out of hospital. You can use a diary to track your progress. After two or three weeks you should be able to walk longer distances.

Talk to your cardiac rehab team about how to increase your physical activity to a level that is suitable for you.

For more information on physical activity, and some safety tips, see page 42.

Housework and gardening

You can start doing light work in the house as soon as you feel able – for example, washing up and dusting. After a few weeks you may feel well enough to do other jobs like vacuuming and light gardening.

If you've had surgery where the breastbone was cut, you shouldn't lift, push or pull anything heavy or carry out certain tasks until your breastbone is completely healed, which takes at least three months. These tasks include things like carrying baskets of washing or shopping bags, or picking up a kettle full of water. When getting up from a chair, take care not to push through your arms. Take your weight through your legs instead.

As you recover, you will be able to do more and get back to your normal routine. You can gradually increase from carrying light to moderate and then normal loads, and from short to longer-lasting tasks.

Driving

Most people who have a heart condition can continue to drive. It depends on what sort of heart condition you have, whether you have any symptoms, and the type of treatment you've had. Your doctor will advise you on when you can start driving again.

To find out if you need to tell the DVLA (Driver and Vehicle Licensing Agency) about your heart condition or about a treatment you've had for it, visit www.gov.uk/health-conditions-and-driving. Or you can call them on 0300 790 6806, or write to them at DVLA, Swansea SA99 1TU.

If you have a car or motorcycle licence

- If you have **angina** and it is well controlled, you can drive.
- If you've had a **planned coronary angioplasty**, you shouldn't drive for one week after having the angioplasty.
- Many people who have had a **heart attack** are not allowed to drive for the first month after their heart attack.
- Some people who have had a **heart attack** and completed **successful treatment with an angioplasty** will be able to start driving again after one week. But check this with your doctor.
- If you have had **coronary bypass surgery**, you will have to wait at least four weeks before you can start

driving again. However, many surgeons prefer people to wait for at least six weeks, to make sure the breastbone is healing properly.

If you have a heart condition or have had a treatment that we haven't mentioned, ask your GP or the DVLA about when you can start driving again.

If you have a bus, coach or lorry licence

If you have a licence to drive one of these vehicles, special regulations apply. You'll need to tell the DVLA about your condition and check with them whether you can continue to drive.

Telling your insurance company about your heart condition

Whatever kind of driving licence you have, you must let your motor insurance company know about your heart condition. If you don't, your insurance may not be valid.

Returning to work

Most people will be able to go back to their previous job after they've had treatment for their heart condition. How soon you return will depend on your

heart condition, the type of treatment you've had, your recovery, and the kind of work you do. Talk to your doctor or the cardiac rehab staff about this.

If you've had a coronary angioplasty that was planned, and there were no complications, you may be able to return to work within a few days, depending on the type of work you do.

If you've had a heart attack or heart surgery, you may be able to go back to work after six weeks if your work involves only light duties. But, if you have a heavy manual job, you may not be able to return to work for at least three months. You might need to get a 'fit note' from your GP to give to your employer. This states if you're unfit to work and when you will be able to return.

When you first go back to work, you may want to ask your employer if they can give you lighter work for a while, or if you can return to work gradually – such as working shorter days or weeks.

Going on a cardiac rehab programme helps you to improve your fitness levels and feel more confident about returning to work, whether your job is very

physical or not. There's also the option to take part in the programme after you've gone back to work. Many employers allow their staff to do this, as it's a vital part of their recovery.

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

Sex

It's understandable that people with a heart condition and their partners may have concerns about their sex life. However, lots of people with a heart condition continue to enjoy sex. Like any other physical activity, having sex can temporarily increase your heart rate and blood pressure. This increases the work of the heart and, in some people with coronary heart disease, may temporarily lead to breathlessness or chest pain. However, sex is just as safe as other equally energetic forms of physical activity or exercise.

Most people who have had a heart attack and had an uncomplicated recovery can start sexual activity when they feel comfortable to do so – usually after about four weeks. But some couples may not feel ready after this time and prefer to wait longer.

After you've recovered from a heart attack, sexual activity presents no greater risk of triggering another heart attack than if you had never had one.

If you've had heart surgery, you can have sex as soon as you feel you've recovered. For most people this is within a few weeks, but some people prefer to wait longer. Be careful not to put your chest wound under too much pressure.

To reduce the chance of having **angina symptoms** during sex, avoid having sex after a heavy meal and try not to be too energetic at the start of your sexual activity. And, if you have a GTN (glyceryl trinitrate) spray or tablets, keep them nearby in case you need them.

Loss of sex drive is not uncommon after illness. Some men may experience impotence (difficulty getting or keeping an erection). This may be the result of emotional stress. Sometimes it can also be the result of taking certain medicines such as beta-blockers, or the result of circulation problems or diabetes. Impotence is a common problem, so if you're having difficulties, talk to your doctor or cardiac rehab team about it.

If you have a heart condition, or if you're taking medicines for your heart condition, you should be cautious about taking PDE-5 inhibitors such as Viagra. **Always check with your doctor beforehand.**

Alcohol

If you're taking painkillers, alcohol can have a more powerful effect. If you're taking an anticoagulant such as warfarin, you can only drink a small amount of alcohol, as it can interfere with how your medication works. For more on alcohol, see page 41.

Holidays

A holiday can give you the chance to rest and unwind, but it's often better to wait until you've recovered. Most people are able to fly once they've recovered and their condition is stable. Talk to your doctor or cardiac rehab team about when it's OK for you to go away, and how soon you can fly.

Travelling can be tiring and long journeys can increase the risk of developing a deep vein thrombosis (DVT). This is a serious condition where a blood clot forms in the calf of your leg. So if you are travelling, make sure

you have frequent breaks to get up and walk around. Whichever form of transport you're taking, allow plenty of time for your journey, and don't carry heavy bags.

If you go on holiday, avoid travelling to countries that are very hot or very cold, and avoid places at a high altitude. You might want to think about staying in accommodation that's easily accessible and close to amenities. Avoid hilly destinations unless you are fit enough for that level of activity.

When you go away, keep an up-to-date list of all your medicines and doses with you, just in case you lose any of them. Take enough medicines for your holiday in your hand luggage. And make sure you have suitable travel insurance and that your insurance company knows about your medical history.

Follow-up appointment

As a follow-up, you may be given an outpatient appointment to visit your cardiologist or surgeon at the hospital, or your recovery may be checked at your cardiac rehab programme. Or you may have a follow-up assessment from your GP.

Before you leave hospital, try to find out what sort of follow-up you should expect. If, four weeks after you are discharged from hospital, you still haven't heard about an appointment and you were told to expect one, contact the hospital.

If you have an outpatient appointment, your doctor will assess how well you are recovering, and if necessary change any medicines or repeat some tests.

Before you go for your appointment or follow-up assessment you may find it helpful to write down any questions you want to ask the doctor.

If you're a carer

Caring for someone can be emotionally and physically exhausting. So make sure you have regular breaks yourself.

Eating healthily, doing regular exercise, and getting a good night's sleep will help you to keep well and cope with being a carer.



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

The aim of cardiac rehabilitation is to help you to recover and get back to as full a life as possible.

WHAT CAN I EXPECT FROM MY CARDIAC REHAB PROGRAMME?

You should be invited to go on a cardiac rehab programme, which you can start after you've left hospital and have recovered fully after your treatment. The information, support and confidence you get from the programme can help you to make healthy lifestyle choices. Research shows that cardiac rehab reduces the risk of dying from coronary heart disease, and leads to an improvement in quality of life.

The programme usually involves going to several sessions, each lasting an hour or two, either once or twice a week. Some programmes may have shorter or longer sessions, and vary in the number of weeks they run for. Programmes are usually run in a hospital, or in a community or leisure centre.

Most programmes are for people who have had a heart attack, a coronary angioplasty, coronary bypass surgery or another type of heart surgery. Some cardiac rehab programmes invite people who have an ICD, or who have angina or stable heart failure.

Cardiac rehab programmes and services vary widely throughout the UK. Programmes usually include one or more of the following:

- Physical activity.
- Education on healthy lifestyle choices, such as sticking to a healthy diet, and how to take your medicines.
- Relaxation.
- Psychological support.

Before you're invited to start a cardiac rehab programme, you may be invited to an assessment appointment with a cardiac rehab specialist. You can then agree a programme of goals and activities that are best for you, and where you can do the programme.

Physical activity

Structured physical activity is an important part of your rehabilitation. It will help with your recovery and confidence, and improve your fitness, strength and general wellbeing.

The types of activity sessions at the cardiac rehab programme vary from one programme to another. Most programmes offer sessions for groups, but some provide women-only sessions or a home-based programme.

If you're quite limited by your heart condition, or have another condition that affects your movement – such as arthritis – you may find that your activities are restricted. However, the physiotherapist in the team can adapt the exercise programme for you so that you can continue to exercise. Even a small amount of activity can be helpful in regaining your confidence, helping your recovery and improving your fitness.

You will be encouraged to start slowly and gently, and to increase your exercise gradually over the course of the programme. It's very important that you work within your limits and follow the advice you're given.

The main part of the exercise sessions will be 'aerobic' exercises. These help to improve your muscles, heart and circulation. Most cardiac rehab programmes include a range of different exercises. Some use equipment such as exercise bikes or treadmills, while others include body weight exercises, chair-based exercises and walking programmes.

To help you manage your physical activity while you're doing your exercise, you may be asked to check and record your heart rate (someone will show you how to do this). You may also be asked to rate how hard you feel you're working. This information will help you and the staff know if you're exercising at the right level and intensity. With practice, you'll recognise if you're doing too much, and know how to exercise safely.

Education

The cardiac rehab programme may include information or education sessions on particular topics. The aim is to help you make healthy lifestyle choices, which may help reduce your risk of further heart problems. Topics may include the following:

- The different types of heart conditions such as coronary heart disease and heart attack.
- Treatments for heart conditions, including heart operations, coronary angioplasty and medicines.
- The risk factors for coronary heart disease – such as smoking, high blood cholesterol and high blood pressure – and what you can do about them to help reduce your risk.
- Healthy lifestyles, including healthy eating and physical activity.
- Practical issues such as driving, returning to work, and holidays.
- What you, or your relatives or friends, should do if you feel unwell.

- How to manage stress.
- Long-term management of your condition.

Some programmes also invite different specialists, such as a dietitian or pharmacist, to come and speak to the group.

While you're doing the programme, you may also receive individual help or support to make healthy changes – such as help with stopping smoking or losing weight.

Relaxation and psychological support

Some cardiac rehab programmes teach you different relaxation techniques so you can find one that suits you. You'll also find out how important relaxation is in helping to manage stress levels.

Some programmes may offer one-to-one counselling or advice on managing stress levels to people who need it. If you need some help with coming to terms with your heart condition, you may be able to see a psychologist.

Other benefits of a cardiac rehab programme

Going to a rehabilitation programme can offer other benefits as well.

- It can improve your confidence and help you return to your usual activities more quickly.
- It gives you the chance to ask questions or talk about any worries you may still have, which can help relieve anxiety.
- You can meet other people who have been through the same thing as you, which some people find very helpful.
- It can be good fun too!

If possible, encourage your partner or a family member or friend to go along with you. This can help reassure them and give them the chance to ask questions. They may also benefit from talking to other carers. Most programmes are happy for you to bring a partner, relative or friend with you to the programme, but check with your rehab team to make sure.

After the programme

After you've finished your cardiac rehab programme, it's vital to carry on with regular physical activity and a healthy lifestyle in the long term. This will help protect your heart and reduce your risk of further problems.

The cardiac rehab staff, or your doctor, may refer you to exercise classes. Some leisure centres and gyms run classes for people with heart conditions and have specially trained instructors who can help you. Some heart support groups run exercise classes (see page 73). Or you may prefer to do your own exercise.

Your rehab team can also refer you to other services to help you continue with the lifestyle changes you want to make – such as a stop-smoking service.

Finding your nearest cardiac rehab programme

If you haven't already been invited to a cardiac rehab programme, ask your GP, visit www.cardiac-rehabilitation.net or call our Heart Helpline on 0300 330 3311.

What if I can't get to a rehab programme?

If it's difficult for you to get to a rehab programme at the local hospital – for example, if you live in a rural area – there are other options, such as:

- following an education and exercise plan yourself at home, with support from the cardiac rehab team
- using a cardiac rehab exercise DVD, or
- using a 'tele-medicine system', where you may be provided with equipment which allows you to share information with your cardiac rehab team.

CHRIS'S STORY

Chris was a PE teacher for over 20 years and had always kept physically active. But in 2011, while he was driving, he felt a strange sensation in his chest.

"I didn't want to trouble anyone by calling for an ambulance, so my wife drove me to the nearest A&E. I was having a heart attack and needed an emergency angioplasty and stent.

I realised that for most of my life I was always on the go. I started cardiac rehab a few months later, completing an eight-week course. I can't speak highly enough of the team's encouragement and expertise. Each week we exercised, and then had group talks about medicines, diet and relaxation techniques. My wife came along to the talks too, so we could both take it all in. I even kept the hand-outs as they were all very useful.

One thing that surprised me was how important exercise is – equally important as taking my medicines. Now I go cycling three times a week."



There are several things you can do to help keep your heart healthy and reduce the risk of further problems.

- If you smoke, stop.
- Control high blood pressure.
- Control your blood cholesterol.
- Eat a healthy, balanced diet.
- Keep physically active.
- Keep to a healthy weight and body shape.
- If you have diabetes, control your blood glucose.
- Take your medicines as prescribed.
- Avoid air pollution.

If you smoke, stop

Smoking is one of the major causes of coronary heart disease and increases the risk of having a heart attack.

If you are a smoker, stopping smoking is the single most important step you can take to reduce the risk of having a heart attack.

For people who have already had a heart attack, stopping smoking is the most important thing you can do for your heart health and significantly reduces

the risk of dying as a result of having a heart attack.

Your GP, practice nurse, cardiac rehab team or local smoking cessation advisor can give you advice on how to give up, and information on stop-smoking services and nicotine-replacement products to help you stop smoking. Or you can try one of the following websites or helplines.

- **Smokefree** www.nhs.uk/smokefree
Smokefree National Helpline: 0300 123 1044
- **Quit** www.quit.org.uk
Quitline: 0800 00 22 00

 For more information on smoking, see our booklet
Stop smoking.

Control high blood pressure

High blood pressure increases the risk of having a heart attack or a stroke, and over time it can cause the heart muscle to pump less effectively.

If you have high blood pressure, it's essential to control it. Even a small reduction in blood pressure

can lower your risk of further heart problems. Some people can control their blood pressure by losing weight, doing more physical activity and cutting down on alcohol and salt (see pages 41 to 52). However, some people need to take medicines too.

Control your blood cholesterol

A high cholesterol level can increase the risk of heart attack and stroke. The most common cause of high cholesterol is having too much saturated fat in your diet. To help reduce your cholesterol level, you need to cut down on the amount of saturated fat you eat.

If you have coronary heart disease, or if you've had a heart attack, it's likely that your doctor will give you a medicine such as a **statin**. This is to reduce your cholesterol level and to give your heart further protection. Even if you don't have high cholesterol levels, it's likely you will still benefit from taking these medicines.



- For more information, see our booklets:
- **Blood pressure**,
- **Reducing your blood cholesterol**, and
- **Medicines for your heart**.

Eat a healthy, balanced diet

Eating a healthy, balanced diet will help to protect your heart. You should:

- eat a Mediterranean diet which includes:
 - healthier fats
 - more grains, pulses, nuts and beans
 - more fish and less meat, and
 - plenty of fruit and vegetables
- cut down on salt, and
- if you drink alcohol, keep within the recommended limits and have at least two alcohol-free days a week.



- For more information on healthy eating, see our booklet **Eating well**.

Keep physically active

Regular physical activity helps to keep your heart healthy and can reduce the risk of having further heart problems.

Physical activity has other benefits too. It can help:

- lower your blood pressure
- improve your cholesterol levels
- control your weight and body shape
- reduce the risk of diabetes, or help to control diabetes
- make you feel better and boost your confidence, and
- relieve stress and anxiety.

How much and what sort of activity to do

It's recommended that adults do a total of at least **150 minutes (two and a half hours) of moderate-intensity activity a week**. This is activity that makes you feel warmer and breathe harder, and makes your heart beat faster than usual, but you should still be able to carry on a conversation.

Examples of activities recommended for the heart include brisk walking, cycling, or climbing stairs.

You can do the 150 minutes in bouts of 10 minutes or more. One way to achieve the 150 minutes is to do 30 minutes' activity a day, five days a week.

However, **if you've recently had a heart attack, angina, a coronary angioplasty or heart surgery, it's important that you start slowly, and gradually build up to this level of activity over time**. Attending a cardiac rehab programme (see page 27) is a very good way of making sure that you exercise at a level that's safe for you.

Some people with a heart condition may not be able to do as much as 150 minutes a week. And some might be limited because they have mobility problems. But it's still important that you try to be as active as possible. Doing even a small amount of exercise is better than doing none.

Try to do something every day. Regular, moderate-intensity activity is better than occasional bursts of vigorous activity.

It's important that you talk to your cardiac rehab team, your doctor or your nurse about how much activity you can do and how to increase it. You can also ask them what types of activity are suitable and safe for you to do. Always check this before you take up a new activity.

If you want to achieve higher levels of fitness, talk about your goals with your cardiac rehab team.

Warming up and cooling down

Whenever you do any exercise, start slowly for the first few minutes and build up gradually. This will prepare your muscles and heart for exercise. At the end, don't stop suddenly. Instead, spend some time slowing down gradually.

Exercises and activities to avoid

Depending on your condition, you may be advised to avoid certain strenuous everyday activities, such as carrying very heavy objects, doing heavy DIY or gardening.

Exercises such as press-ups and sit-ups are not recommended if you have a heart condition.

But it's important to build and maintain your muscle strength. You can learn how to do this safely when you are doing your cardiac rehab programme.

If you have angina

It's important to keep active if you have angina, but it should be within your limits. Avoid going out in very cold, windy or very hot weather as the heart has to work harder and the risk of having symptoms of angina increases.

If, while you're exercising, you get symptoms such as chest pain or discomfort, or breathlessness, or if you think you may be about to have these symptoms of angina, then slow down. If that doesn't work, stop and rest. Your doctor may have given you a GTN (glyceryl trinitrate) spray or tablets to carry with you. Keep the spray or tablets with you and use them as prescribed. See page 58 for what to do if you get symptoms of angina.

Swimming

Swimming and water-based physical activity such as aquarobics are usually OK for people with a heart condition. But for some people they can increase the strain on the heart.

If you have a heart condition and you want to take up swimming, it's very important that you check with your doctor or cardiac rehab team first. They can advise on local courses that help people swim and exercise safely in water.

Many people who have recently had a heart attack or heart surgery but who used to swim regularly before can go back to swimming when they feel ready. If you have any questions, check with your doctor or cardiac rehab team before you start again.

Safety tips for physical activity

- Avoid doing activity after a large meal or when it's very hot or cold, or at high altitudes, when the heart has to work harder anyway.
- If you're doing any activity outdoors in cold or windy weather, dress warmly. When it's hot, make sure you wear a hat, keep cool, slow down your pace and keep well hydrated.
- Avoid strenuous activity outdoors whenever air pollution is very high (see page 56).
- Make sure your clothing and footwear are comfortable and fit well.
- Don't exercise if you feel unwell, and stop if you get any pain, or feel dizzy or sick. If the symptoms don't go away, get medical attention immediately.
- Include a warm-up and cool-down as part of your exercise.

Keep to a healthy weight and body shape

Keeping to a healthy weight and not carrying too much weight around your middle will help to keep your heart healthy. It will also help to control your blood pressure and reduce your risk of diabetes.

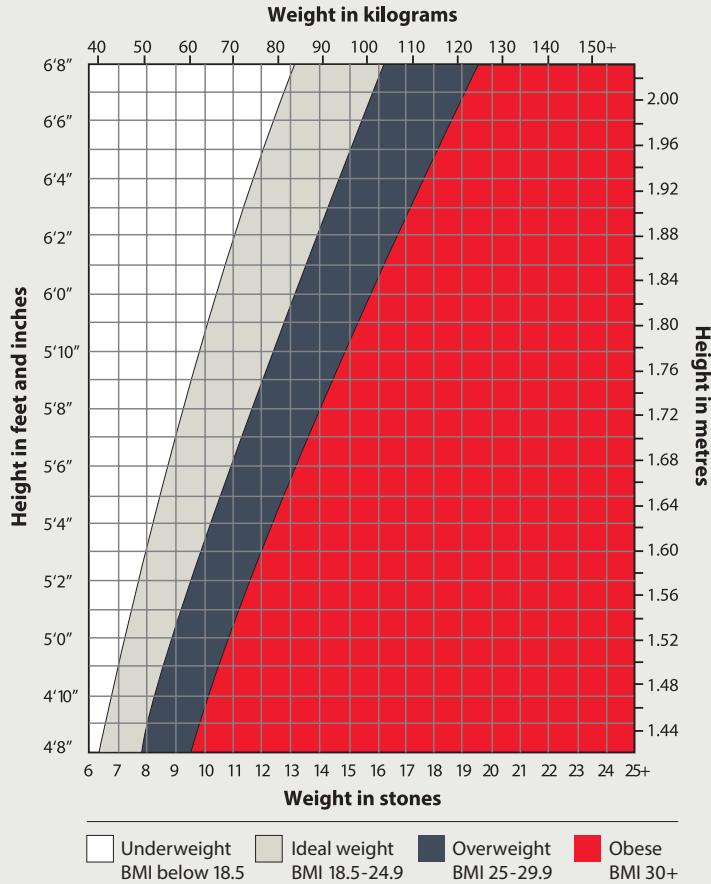
Your weight

To find out if you're an ideal weight – that is, a healthy weight for your height – a measurement called body mass index (BMI) is often used. This is calculated from your weight and height.

You can use the chart on the next page to find out if you need to lose weight. If you fall into the 'Overweight' or 'Obese' category in the chart, you need to lose some weight.

Take a straight line up or down from your weight, and a line across from your height (without shoes). Put a mark where the two lines meet to find out if you are a healthy weight. This is an approximate guide.

Are you a healthy weight?



Your body shape

To find out if you have a healthy body shape, measure your waist with a tape measure. Find the midpoint between the bottom of your ribs and the top of your hips. For most people this is at the level of the tummy button. Breathe out normally and measure around your waist. Try to relax, and avoid breathing in while taking your measurement. Check your measurement in the box on the next page.

Research shows that if you're South Asian, African Caribbean, Black African, Chinese, Middle Eastern or have parents of two or more different ethnic groups, you may be at increased risk of some health conditions at a lower BMI and waist size than people from white European backgrounds. This means the measurements that indicate high risk are lower for people from these groups.

	Your health is at risk if your waist size is:	Your health is at high risk if your waist size is:
Men – White European	Over 94 centimetres (about 37 inches)	Over 102 centimetres (about 40 inches)
Men – African Caribbean – South Asian – some other minority ethnic groups		Over 90 centimetres (about 35½ inches) –
Women – White European	Over 80 centimetres (about 31½ inches)	Over 88 centimetres (about 34½ inches)
Women – African Caribbean – South Asian – some other minority ethnic groups		Over 80 centimetres (about 31½ inches) –

If you need to lose weight or reduce your waist size

The best way to do this is by:

- reducing your calorie intake by cutting down on the amount of fat and sugar in your diet, and
- increasing your daily physical activity, with the aim of doing a total of 150 minutes (two and a half hours) a week (see page 42).

If you have any questions about what or how much you should be eating, ask your GP, practice nurse or cardiac rehab team. If you're very overweight, you may benefit from talking to a dietitian. Your doctor or the cardiac rehab team may be able to arrange this.



For more information on how to lose weight, see our booklet **Facts not fads: Your simple guide to healthy weight loss**.

If you have diabetes, control your blood glucose

Diabetes significantly increases the risk of developing coronary heart disease. It also increases the effect of other risk factors for coronary heart disease, such as high cholesterol levels, high blood pressure, smoking and obesity.

To reduce the risk of developing diabetes, it's important to eat a healthy, balanced diet, stay active, and keep to a healthy weight and body shape.

If you have diabetes, it's very important to make sure you control your blood glucose level, blood pressure and cholesterol level. Doing more physical activity, eating a healthy, balanced diet, and controlling your weight and body shape, will all help to control your diabetes.

It's also important to know your blood sugar levels and how they are affected by physical activity. You can find out more about this when you are at your cardiac rehab programme.



For more information, see our booklet **Diabetes and your heart**.

Take your medicines

Medicines are an important part of your ongoing treatment as they help to protect your heart and reduce the risk of future problems.

It's important to know what medicines your doctor has prescribed for you, and understand what they do and the possible side effects to look out for. A pharmacist or one of the cardiac rehab team will provide information on your medicines and you'll have the opportunity to ask questions and find out more about them.

Occasionally, your doctor may need to change your medicines or your dose. Keep an up-to-date list of the medicines you take, the doses, and when and how often you need to take them.



For more information on medicines,
see our booklet **Medicines for your heart**.

Reduce stress

Stressful situations can encourage people to have unhealthy lifestyle behaviours such as overeating, drinking too much alcohol, or smoking – all of which can be harmful to the heart.

If you feel stressed or anxious, it's important to identify what may be the cause, so you can learn how to manage it effectively. Your cardiac rehab team can help you to monitor stress and show you ways to help you manage the stress – for example, by doing physical activity or yoga, or using another relaxation technique.

If you're not coping well with your stress or anxiety, talk to your GP who can assess you and may suggest referring you for counselling.



For more information on how to deal with stress,
see our booklet **Coping with stress**.

Avoid air pollution

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. However, if you have a heart condition, whenever air pollution is 'very high', you should avoid going outside for long periods or doing strenuous activity. If air pollution is 'high', you should reduce strenuous activity particularly outdoors, and particularly if you have symptoms.

However, it's still important to be active when air quality is poor, so make sure you're active indoors.



For more information, see our information sheet
Air pollution.

You can dramatically reduce the risk of having heart problems by taking your medicines and following a healthy lifestyle.

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 get chest pain or discomfort from time to time. Sometimes this will be angina, which you will be able to manage at home with your GTN. However, 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 but you think that you are having a heart attack, call 999 immediately.

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

A heart attack 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.

Think quick ... act fast. Call 999 immediately.

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.

A **cardiac arrest** is when a person's heart stops pumping blood round their body and they become unconscious and stop breathing or stop breathing normally.

A person who is having a cardiac arrest may develop a dangerously fast heart rhythm which can be fatal. It is 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.

There are now **public access defibrillators** – or PADs for short – 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 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

The most important thing you can do to help save a person's life is **CPR – cardiopulmonary resuscitation**. This, along with defibrillation, can double someone's chance of survival in some cases. We explain how to do CPR on the next pages.

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.

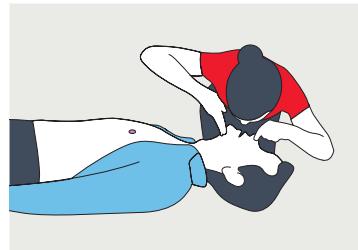
Start chest compressions.

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

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



For more information about training in how to do CPR, see page 72.

FOR MORE INFORMATION

British Heart Foundation website

bhf.org.uk

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

Heart Helpline

0300 330 3311

(A similar cost to 01 or 02 numbers.)

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

Genetic Information Service

0300 456 8383

(A similar cost to 01 or 02 numbers.)

For information and support on inherited heart conditions.

Twitter

@TheBHF

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

Online community

community.bhf.org.uk

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

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 **0870 600 6566**
- email orderline@bhf.org.uk or
- visit bhf.org.uk/publications

You can also download many of our publications from our website. For a list of resources available from the BHF, ask for a copy of our catalogue *Take heart*.

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
- Having heart surgery
- Heart attack
- Heart rhythms
- Heart transplant
- Heart valve disease
- Implantable cardioverter defibrillators (ICDs)
- Keep your heart healthy
- Living with heart failure
- Medicines for your heart
- Pacemakers
- Peripheral arterial disease
- Primary angioplasty for a heart attack
- Reducing your 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 Lifesavers

This BHF campaign aims to help save up to 5,000 extra lives each year by increasing knowledge of CPR (cardiopulmonary resuscitation) and how to use public access defibrillators (PADs) in an emergency. Join our Nation of Lifesavers at bhf.org.uk/lifesavers

- **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 secondary schools and community groups, and for a small fee to workplaces. 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 **0300 330 3300**, 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 **0300 330 3311**.

Make yourself heard – Heart Voices

Heart Voices gives you the skills, confidence and knowledge you'll need to influence health services for the benefit of heart patients and their families across the UK. By signing up, you'll join a network of representatives that speaks out on behalf of heart patients and their carers, and get opportunities to have your say. Visit bhf.org.uk/heartvoices for more information and to sign up.

activity	15, 29, 42
alcohol	23, 41
angioplasty	07
blood pressure	39
carer	25
chest pain: what to do if you get chest pain	58
cholesterol	40
coronary heart disease	06
diabetes	53
driving	17
eating: healthy eating	41
feelings	14
heart attack	07, 60
holidays	23
lifting	17
medicines	14, 54
outpatient appointment	24
pollution	56
primary angioplasty	08
rehabilitation programme	27
risk factors	08
sex	21
smoking	38
stress	55
support groups	73
weight	48
work (returning to work)	19

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:

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THANK YOU

This booklet is part of the *Heart Information Series*. We distributed 2 million booklets from this series last 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, or text **FIGHT** to **70080** to donate £3 to fund our life saving research.



**British Heart
Foundation**

For over 50 years we've pioneered research that has transformed the lives of millions of people living with cardiovascular disease. Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease.

But cardiovascular disease still kills around one in four people in the UK, stealing them away from their families and loved ones.

From babies born with life-threatening heart problems, to the many mums, dads and grandparents who survive a heart attack and endure the daily battles of heart failure.

Join our fight for every heartbeat in the UK. Every pound raised, minute of your time and donation to our shops will help make a difference to people's lives.

Text FIGHT to 70080 to donate £3*

**FIGHT
FOR EVERY
HEARTBEAT**

bhf.org.uk

*This is a charity donation service for the BHF. Texts cost £3 + 1 standard rate msg. The BHF will receive 100% of your donation to fund our life saving research. To opt out of calls and SMS text NOCOMMS BHF to 70060, or if you have any questions about your gift call 0203 282 7863.

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