

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:

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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.

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

CONTENTS

About this booklet	02
The heart's normal rhythm	03
What is atrial fibrillation?	06
What are the symptoms of atrial fibrillation?	30
Types of atrial fibrillation	10
What causes atrial fibrillation?	11
What are the risks of having atrial fibrillation?	13
How is atrial fibrillation diagnosed?	15
Reducing your risk of developing a blood clot	19
How is atrial fibrillation treated?	24
Everyday life with atrial fibrillation	40
Stroke? The symptoms and what to do	44
For more information	45
Index	50
Have your say	51

Atrial fibrillation – or AF for short – is the most common type of abnormal heart rhythm. Most people who have AF are over 65, but some younger people also have it.

This booklet is for people with atrial fibrillation, and for their families and friends. It explains:

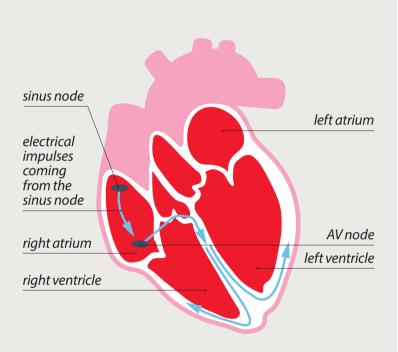
- the heart's normal rhythm
- what AF is
- · how it's diagnosed
- the complications that can happen, and why AF needs to be controlled or treated, and
- the medicines and treatments you may be given to help control or treat AF.

This booklet does not replace the advice that your doctor or specialist nurse may give you, but it should help you to understand what they tell you.

Your heart is a muscular pump which pumps blood through to your lungs, your brain, and the rest of your body. It has four chambers – two upper ones called the right and left **atria**, and two lower ones called the right and left **ventricles**. See the diagram on the next page.

Your heart's pumping action is controlled by tiny electrical impulses produced by a part of the right atrium called the **sinus node**. The sinus node is sometimes called your heart's 'natural pacemaker'.

These impulses make the atria contract and push blood into the ventricles. The impulses travel to the ventricles through the **AV node** (atrio-ventricular node). This acts like a junction box and is sometimes called the AV junction. When the impulse reaches the ventricles, the ventricles both contract, pushing the blood out of your heart to your lungs, your brain, and the rest of your body. In a normal heart rhythm, each impulse from the sinus node makes the atria and the ventricles contract regularly.



While you are resting, your sinus node normally produces between 60 and 100 impulses a minute. It is your heart pumping the blood that produces your **pulse**, which you can feel, for example, at the artery in your wrist. The rate and rhythm of your heart can be measured by taking your pulse. The **rate** is how quickly your heart beats, and the **rhythm** is how regular or irregular the beats are. The heart's normal rhythm is called **sinus rhythm**.

Sometimes your heart will beat faster or more slowly, depending on your general health and whether you have been active or resting. When your heart is beating fast but with a regular rhythm, the rhythm is called **sinus tachycardia**. When it is beating slowly but with a regular rhythm, it is called **sinus bradycardia**. These rhythms do not necessarily mean there is anything wrong with your heart. However, if your heart rate is constantly fast or always feels very slow and you also feel unwell, you should see your doctor.

WHAT IS ATRIAL FIBRILLATION?

Atrial fibrillation (AF) is the most common type of abnormal heart rhythm. An abnormal heart rhythm is also known as an **arrhythmia**.

People with AF have an irregular and sometimes fast pulse, although you may also have a slow pulse rate. Atrial fibrillation happens because, as well as the sinus node sending out regular electrical impulses, different places in and around the atria (the upper chambers of the heart) also produce electrical impulses, in an uncoordinated way. These multiple impulses make the atria quiver or twitch, which is known as **fibrillation**.

In the UK, more than I million people have atrial fibrillation.

Your symptoms depend partly on the type of atrial fibrillation (AF) you have. They can include the following.

- Palpitations. This might feel like a thumping or fluttering sensation in your chest. Palpitations are a common symptom of AF.
- Feeling faint at times.
- Being breathless.
- Being tired or less able to exercise.

Some people don't have any symptoms at all. Also, over time, some people get used to their symptoms or think they have them just because they're getting older.

A doctor or nurse may discover the condition during a routine medical check, while they are checking your pulse. Sometimes AF is diagnosed after a person goes to see their doctor because they can feel their heart beating fast or with an irregular rhythm. Your doctor will only be able to confirm that you have AF once you have had an electrocardiogram (ECG). (See page 16.)

It's important to remember that not all palpitations or irregular heartbeats are caused by AF. You may have a different type of arrhythmia. Or, your heart rhythm may be normal but you may be experiencing ectopic beats – early or extra heartbeats – which can happen because of stress or anxiety. People of all ages can get ectopic beats. In most cases they are not caused by an underlying heart condition, are not dangerous and do not need treatment.

There are three types of atrial fibrillation.

- Paroxysmal atrial fibrillation is atrial fibrillation that comes and goes. It usually lasts for less than two days and can last for up to seven days, but it is not there all the time.
- Persistent atrial fibrillation lasts longer than seven days at a time and usually needs treatment with medicines or with a procedure called cardioversion. (We explain what cardioversion is on page 25.)
- Permanent atrial fibrillation is there all the time, and your heart never returns to a normal sinus rhythm.

A **risk factor** is something that increases your risk of developing a disease or condition. The risk factors for getting AF include:

- getting older, particularly being 65 or older
- coronary heart disease
- high blood pressure
- heart valve disease
- previous heart or lung surgery
- myocarditis (inflammation of the heart muscle)
- cardiomyopathies (diseases of the heart muscle)
- an overactive thyroid gland
- heart failure
- lung infections, such as pneumonia
- being overweight, especially if the person also has sleep apnoea (interrupted breathing while sleeping), and
- substance or alcohol abuse.

Medicine can reduce the risk of a clot developing in the heart due to atrial fibrillation.

Having atrial fibrillation increases the risk of developing a blood clot inside the chambers of the heart. This is because the AF disturbs the normal flow of blood through the heart, causing turbulence. The turbulence causes the blood to form small clots. If a clot forms in your heart, it can travel through your bloodstream to your brain and cause a **stroke**.

Sometimes AF can make the heart muscle less efficient at pumping blood around your body. This is what makes some people with atrial fibrillation feel unwell or tired.

Because of these possible complications, you may need treatment to control either your **heart rhythm** or your **heart rate**, or both. We explain more about these treatments on page 24.

Your doctor will assess your risk of having a stroke or another major complication. This will help to decide on the best treatment for you. The assessment – known as the CHA₂DS₂-VASc points system – takes into account:

 your age (the older you are, the greater your risk of having a stroke)

- how well your heart is working
- if you already have heart disease
- if you have diabetes
- your gender
- if you have already had a stroke or symptoms of a stroke, and
- your blood pressure.

Your doctor may decide to give you a medicine, called an anticoagulant, to reduce the risk of blood clots forming and causing a stroke. If your score is more than 1 on the points system, you will probably be offered an anticoagulant. We explain more about anticoagulants on page 19.

However, not everyone will be prescribed an anticoagulant to reduce their risk. For a small number of people, the risk of having a stroke caused by bleeding in the brain may be greater than the risk of having a stroke caused by a clot. If this applies to you, you can discuss it with your doctor.

If you visit your doctor because you have some of the symptoms described on page 08, or for another reason, they may check your pulse. If they notice that you have an irregular pulse, you will be asked to have an **electrocardiogram** (ECG) to find out if the cause is AF.

If your irregular rhythm is not there all the time – that is, if it comes and goes – you may need to have **24-hour ECG monitoring**, to make sure that the ECG records some episodes of the irregular rhythm.

Your doctor may use other devices to diagnose your irregular heart rhythm, including a **cardiac event recorder** or an **implantable loop recorder**.

We describe all these tests and devices on the next pages. For more information on them, see our booklet *Tests*.

24-hour ECG monitoring

Electrocardiogram (ECG)

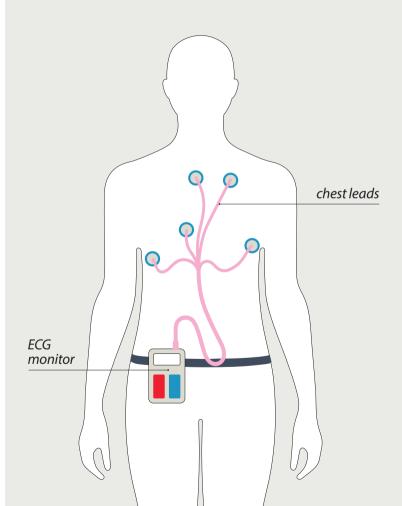
This is a test that gives information about the electrical activity of your heart. The ECG helps to identify the source of the abnormal rhythm.

24-hour ECG monitoring

This is also known as **Holter monitoring** or **ambulatory ECG monitoring**.

This technique involves continuously recording an electrocardiogram (ECG) over 24 hours, or for longer in some cases. It is usually done as an outpatient. The test is safe and painless.

You wear the device on a belt around your waist. Several leads from the device are taped to your chest. (See the diagram on the next page.) The device records the electrical activity of your heart.



Cardiac event recorders

If you have symptoms that don't happen frequently, you may be given a small electrical recording device to keep with you, so you can record your heart's rate and rhythm at particular times. The hospital staff will tell you how to record any irregular rhythm that you feel, and how to send the recording to them.

Cardiac memory device

A cardiac memory device is a type of cardiac event recorder. When you feel an irregular heart rhythm, you hold the device to your chest to make a recording. You then transmit the recording to your hospital by placing the device next to the mouthpiece of your phone.

Implantable loop recorder

An implantable loop recorder is a small, slim device – about the size of a packet of chewing gum or a computer memory stick – which is implanted under the skin. (Some newer devices are even smaller than this.) You activate the device when you feel the abnormal rhythm. The hospital staff will show you how to do this.

Atrial fibrillation (AF) increases the risk of clots developing in the heart, which may lead to a stroke (see page 13).

Anticoagulants

Some people with AF are given an anticoagulant medicine to reduce their risk of a blood clot developing. Your doctor might prescribe:

- either warfarin, which has been used for a long time to reduce the risk of clots
- or newer medicines called NOACs, which stands for 'new oral anticoagulants'. These include dabigatran, rivaroxaban and apixaban. However, your doctor won't prescribe NOACs for you if your AF is caused by a heart valve problem.

If you are in hospital with a new diagnosis of AF, you may first be given **heparin** (another type of anticoagulant) as an injection, and then warfarin or NOACs before you go home.

These anticoagulant medicines are sometimes called 'blood-thinning medicines'. They all help to reduce the risk of blood clots forming.

Aspirin has been shown to be mostly ineffective at preventing strokes in people who have been diagnosed with AF, and is not recommended by NICE – the National Institute for Health and Care Excellence. (NICE is the organisation that sets guidelines for the treatment of different health conditions.)

It is important that you take your anticoagulant medicine as prescribed, as it will greatly reduce your risk of having a stroke. This applies to you, whatever type of atrial fibrillation you have.

If you have been prescribed warfarin, you will need to have regular blood tests to make sure you are getting the right dose. The blood test is a way of measuring your INR – the time it takes for your blood to clot or, in other words, how thin your blood is. Your doctor will be able to adjust your warfarin to keep your INR at the right level.

If you're taking NOACs, you don't need to have the blood tests to measure your INR.

Your doctor or specialist nurse should discuss with you which anticoagulant is best for you. They will take into account your condition and your CHA₂DS₂-VASc

score (see page 13), and explain the risks and benefits of the different types of anticoagulants.

If you're taking anticoagulant medicine and you suffer a head injury, such as falling and hitting your head, or experience a blow to the head, seek medical help without delay to rule out internal bleeding which may not be immediately obvious.

Other treatment to reduce the risk of developing a blood clot

If you are unable to take either warfarin or NOACs, or if there is a clinical reason that makes it unsafe for you to take them, you may be offered a procedure called a **left atrial appendage occlusion**. This is where a special device is inserted into your heart. If any blood clots form, the device helps to prevent them from travelling to your brain and causing a stroke.

HILDA'S STORY

Hilda Henry first started to experience symptoms of atrial fibrillation (AF) in 2002.

"My heart started racing when I was on holiday in France. I was scared. It happened a few times. I tried to ignore it and pretend it wasn't happening by going on long walks, but I just became really breathless and exhausted.

When I got back to the UK I saw my GP, who thought it might be panic attacks, but one day it was really bad and I had to go into hospital for a week. I was diagnosed with paroxysmal atrial fibrillation.

I now take warfarin, and had an ablate and pace procedure done. It was successful, and now everybody says I look really well. My energy levels are much better and all my anxiety is gone. My confidence has come back too. I've even bought my first ever car and drive to lots of different places to go on long walks."



Atrial fibrillation (AF) can be treated in a number of ways, but the different types of treatment are not suitable for everyone. Your doctor will tell you which treatment is best for you. The following things will influence which type of treatment you have:

- which type of AF you have
- how long you have had AF for
- how your symptoms affect your quality of life
- which treatments you have already tried
- any other heart conditions you may have, and
- your age.

The main aims in treating your AF are:

- to reduce your risk of developing a blood clot (as we have described on page 19), and
- to control your heart rate and rhythm, which should help to control any symptoms you're having.

Controlling your heart rhythm and heart rate

- Rhythm control means giving you treatment –
 such as cardioversion, pulmonary vein isolation, or
 ablate and pace to try to get your heart back to a
 normal sinus rhythm. The type of rhythm control
 treatment you have depends on the type of AF you
 have and how long you have had it. We describe
 some of the treatments you may be given below.
- Rate control means giving you treatment to control the rate of your heartbeat, so that your heart beats more slowly, even if the heartbeat remains irregular. We explain more about this on page 36.

Electrical cardioversion

This is also called **direct current cardioversion**, **mechanical cardioversion** or **cardioversion** with a **defibrillator**.

If you have been diagnosed with persistent atrial fibrillation and your doctor thinks you are suitable for rhythm control treatment, you may be offered electrical cardioversion as the first form of treatment. This involves using a defibrillator to give you a controlled electric shock to get your heart rhythm back to normal.

If you have had AF for less than two days, see page 29 for more information about electrical cardioversion.

If you have had persistent atrial fibrillation for a very long time, electrical cardioversion may not be suitable for you. This is because, the longer you have had AF, the less likely it is that the treatment will be successful.

If your AF is caused by an overactive thyroid or by disease of your heart valves, these conditions may need to be corrected before you can have the cardioversion.

What happens?

Your doctor will ask you to take anticoagulants for some time before you have the treatment. This is to reduce the risk of a blood clot forming and then breaking off during the cardioversion. If the anticoagulant you are taking is warfarin, you will need to have regular blood tests while you are taking it, to make sure that your blood is thin enough. You may also be given a medicine to slow your heart rate down.

You will be given a light general anaesthetic, which will make you sleep through the whole procedure.

The doctor or specialist nurse will then use a defibrillator to apply a controlled electrical current across your chest. This aims to shock your heart back into a normal rhythm. The treatment only takes a few minutes.

The procedure does not usually cause any serious side effects, although you may experience some soreness on your chest where the shock was applied. The discomfort will not last more than a couple of days. You might be given a lotion to apply to the sore areas, and pain relief such as paracetamol usually helps too.

You will probably need to continue taking anticoagulants for at least four weeks after the cardioversion, to prevent blood clots from forming. You will have a follow-up appointment after the treatment, and your doctor will then decide if you can stop taking the anticoagulants.

How successful is electrical cardioversion?

This is a successful treatment for some people with atrial fibrillation. However, you may find that, even after a successful cardioversion, your AF returns. If this happens, your doctor or specialist nurse may

repeat the treatment. If it keeps coming back, your doctor will discuss some of the other treatments available.

Cardioversion with medicines

This is also called **chemical cardioversion**.

Medicines which aim to get your heart rhythm back to normal are called **anti-arrhythmic medicines**. Although these medicines are suitable and effective for many people, some people find it takes a while to get used to them.

Examples of medicines that may be used to control the rhythm of your heart include amiodarone, dronedarone, flecainide and sotalol. For more information on these medicines, see our booklet *Medicines for your heart*.

If you've had atrial fibrillation for less than two days

If you are admitted to hospital with atrial fibrillation, and it's clear that you've had it for less than two days, your doctors may give you **cardioversion** treatment to get your heart rhythm back to normal. Before they do this, they will give you a medicine called **heparin** to reduce the risk of blood clots developing. Before you have the cardioversion, you may need to have an **echocardiogram** (an ultrasound scan of your heart) to make sure you don't already have a blood clot.

The treatment can be either **electrical cardioversion** or **cardioversion with medicines**. We describe these two treatments on pages 25 and 28. Which treatment you have will depend on whether you have any other heart or medical problems. Once your heart rhythm is back to normal, your doctor may prescribe a medicine to try to keep the rhythm normal.

Pulmonary vein isolation

AF is often triggered by electrical impulses from cells within the pulmonary veins – the veins that take blood from the lungs to the left atrium of the heart. Pulmonary vein isolation aims to stop these triggers from entering the heart and causing the AF.

Most people who are offered pulmonary vein isolation treatment have tried several types of medicines first. You are more likely to be offered this treatment if you are getting symptoms with your AF even after being treated with medicines.

What happens?

A few days before the procedure, you will receive information explaining what to do about the medicines you are taking for your AF, and about your anticoagulants if you are taking them. It is essential that you follow these instructions carefully. If you don't receive this information a few days before the procedure, contact the hospital for advice.

The procedure is often carried out using a local anaesthetic in your groin, and a sedative to help you relax. A very small number of people have a

general anaesthetic instead of a local one. The procedure takes place in a specialised X-ray room called a catheter laboratory (or 'cath lab' for short). You will be lying down on a bed while the procedure is carried out. Very thin wires called electrode catheters are passed into a vein at the top of your leg. They are then gently moved into position in your heart. Using radiofrequency waves or a freezing technique called cryo-ablation, the treatment produces a small circular scar around the pulmonary vein. The scar blocks the abnormal electrical impulses in this part of your heart.

The procedure can take several hours. It can be uncomfortable, but the sedative and anaesthetic should help ease the discomfort. After the procedure, you will need to stay lying down to rest for a few hours.

Your doctor may prescribe a different medicine for your AF depending on the result of the procedure, or they may ask you to take your usual medicine. You'll also need to carry on taking your anticoagulant for a few weeks. The AF may continue for several weeks after the treatment before it settles down.

How successful is pulmonary vein isolation?

Many people who have pulmonary vein isolation are eventually able to stop taking all medicines for AF, although they may need to continue taking an anticoagulant for longer.

Other people find that, even though the procedure did not get rid of the AF completely, their symptoms improve a lot in the long term. For many people, this significantly improves their quality of life.

What are the risks?

The most serious risk of a pulmonary vein isolation procedure is the risk of having a stroke either during the procedure or soon afterwards. Your doctor will discuss your individual risk with you.

Ablate and pace

If your medicines are not controlling your symptoms well but your doctor does not think you are suitable for a pulmonary vein isolation procedure, you may be offered a treatment called **ablate and pace**. You are more likely to be offered this type of treatment if you are in your late 70s or in your 80s, as it provides the most benefits for people in this age group. In

some cases, a younger person may be offered this treatment if he or she has long-standing persistent atrial fibrillation that is very poorly controlled and that causes lots of symptoms.

What happens?

Ablate and pace involves 'ablating' (destroying) the AV node (see the diagram on page 04) and implanting an artificial pacemaker. You will need to go into hospital for the treatment and will probably have to stay in hospital for one night after the procedure.

You will be given a local anaesthetic in your groin. Very thin wires called electrode catheters are then passed into your body through a vein at the top of your leg. They are then gently moved into position in your heart. The ablation technique involves using radiofrequency waves to destroy the AV node. An artificial pacemaker is then implanted immediately afterwards. Or, sometimes the pacemaker is implanted first, and the AV node ablation is performed a few days or weeks later.

This treatment means that you will still have atrial fibrillation, but your heart rate and rhythm will be better controlled by the artificial pacemaker. You will still need to take an anticoagulant medicine, because you will still have AF.



For more information about having a pacemaker implanted, see our booklet Pacemakers.

Surgical maze procedure

If you have atrial fibrillation and have not responded to any other treatment, you may be offered a **surgical maze procedure**. In this, the surgeon 'cauterises' (burns) the parts of the left atrium that are responsible for the AF. This procedure is done either with open-heart surgery or using 'keyhole surgery' (surgery carried out through a much smaller cut than with traditional surgery). The surgical maze procedure may be suitable for people who are about to have open-heart surgery anyway – for example, to replace or repair a faulty heart valve.

More recently, the maze procedure has been carried out using a catheter approach (similar to the approach described for pulmonary vein isolation on

page 30), rather than traditional surgery. However, this procedure can take much longer than pulmonary vein isolation, and often needs to be repeated.

The 'pill in the pocket' approach

If you have paroxysmal atrial fibrillation (the type that comes and goes), your doctor may give you medicine to take only when the paroxysms (attacks or episodes) happen. This is known as the 'pill in the pocket' approach. Examples of medicines that are used for this approach include flecainide, sotalol and propafenone.

Your doctor is more likely to use this approach if:

- your heart is otherwise normal and the episodes of AF don't happen very often, and
- when the episodes do happen, they respond quickly to your medicine.

You should only take this medicine when your AF happens, and it is important that you take only the dose you have been prescribed. If you feel very unwell even after taking the medicine, call your doctor for advice.

Using medicines for rate control

If your doctor cannot get your heart back to a normal rhythm using either electrical cardioversion or cardioversion with medicines (or both), or if your doctor did not think these treatments were suitable for you in the first place, they will give you medicines to try to control how quickly your heart beats during AF. This means that, although you will still have AF and your heartbeat will still be irregular, your heart will be able to work more efficiently at a slower rate. Your doctor may prescribe medicines to control both your rate and rhythm. The medicines will lower your heart rate but, because you still have AF, you will need to keep taking anticoagulants.

Examples of medicines used for rate control include digoxin, beta-blockers and calcium-channel blockers.

It's important that you take your medicine as prescribed, as it will greatly reduce the risk of the atrial fibrillation causing you to have a stroke.

ALAN'S STORY

Alan Weaver was diagnosed with atrial fibrillation (AF) in 2011.

"I first thought I had a problem when my heart started racing for no apparent reason. When I saw my GP, I was diagnosed with atrial fibrillation. Unfortunately, I had quite a few side effects from some of the medicines I was given, and it was difficult to manage my warfarin because I work away a lot.

My first cardioversion lasted for one week, and my second for only a month, so in 2013 I was referred for an ablation, which was successful. I'm now off my medication. I still have follow-up appointments with my doctor, and I'm gradually learning what works for me and what doesn't. Caffeine usually made my AF worse, so I don't drink it at all now, and I avoid wine as that has a similar effect for me. I hope I can avoid going back into AF, and I'll make whatever changes I need to, to give myself the best chance."



Work

Most people with AF can carry on working in their usual job. Some people may find that it is difficult to work if their symptoms are not controlled well. Talk to your doctor or specialist nurse for advice if your symptoms are stopping you from working. Some workplaces have machinery that may affect how a pacemaker works. So, if you have had a pacemaker inserted to treat your AF, check with your pacemaker clinic that it is OK for you to go back to work.



For more information, see our booklet Returning to work.

Driving

If you have a licence to drive a car or motorcycle
If you have a licence to drive a car or motorcycle, you
are likely to be able to continue to drive, as long as
your AF has been well controlled for at least four
weeks. You must not drive if you have ongoing
symptoms that could affect your ability to drive
safely. There are different requirements if you have
had an ablation or have had a pacemaker inserted.

Talk to your doctor about whether or not it is safe for you to drive.

To find out if you need to tell the DVLA about your heart condition or about a treatment you have had for it, visit www.gov.uk/driving-medical-conditions. Or call the DVLA on 0300 790 6806, or write to them at DVLA, Swansea SA99 1TU.

If you have a licence to drive a bus, coach or lorry If you have a licence to drive a bus, coach or lorry, special regulations apply. You will need to tell the DVLA about your condition and check with them whether you can continue to drive. Their details are given above.

Telling your motor insurance company about your atrial fibrillation

Whatever sort of driving licence you have, you need to tell your motor insurance company that you have a heart condition and about any treatment that you have had for it. If you don't, your insurance may not be valid.

Physical activity

It's recommended that adults do at least 150 minutes of moderate-intensity physical activity a week. 'Moderate-intensity' means activity that makes your heart beat faster, makes you feel warmer, and makes you breathe faster, although you should still be able to speak in full sentences. You could do the 150 minutes as 30 minutes' activity a day on five days a week, for example. Or you can break the 30 minutes into three 10-minute sessions.

Some people with AF find that they become tired more easily on exertion. However, if you build up your activity gradually, your energy levels will improve and you will gradually be able to do more exercise.

If you feel dizzy or light-headed, or if you get palpitations or any other symptoms during physical activity, stop and rest straight away. If you have any concerns about physical activity, discuss it with your doctor.

Sex

Sex is similar to any other physical activity so, as long as your symptoms are well controlled, having AF should not stop you from having sex.

Travel

You should be able to travel by air as long as you take your anticoagulant medicine in the way your doctor has prescribed and your symptoms are well controlled. It is best to check with your doctor before you travel.

You should find out where your nearest anticoagulation clinic or hospital is at your destination.

If you are travelling long distances that involve a change in time, you will need to ask your anticoagulation specialist nurse or doctor for advice about adjusting the timings of your anticoagulation.

It's also important that you tell your travel insurance company that you have AF. If you don't, this could invalidate your insurance.

If you suspect that you or someone else is having a stroke, you need to act **FAST**. To remember the signs of a stroke and what to do, think 'FAST':

Facial weakness – Can you smile? Has your mouth or eye drooped?

Arm weakness – Can you raise both arms?

Speech problems – Can you speak clearly and can you understand what others are saying?

Time to call 999





If these symptoms disappear within 24 hours, it may have been a transient ischaemic attack or TIA (sometimes called a mini stroke). A TIA is a warning sign that you are at a very high risk of having a stroke - so it is vital that you don't ignore these symptoms. If you get these symptoms or see them in someone else, call 999 immediately.

For more information, contact the Stroke Association on 0303 3033 100 or visit www.stroke.org.uk

British Heart Foundation website

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

Genetic Information Service

0300 456 8383 (A similar cost to 01 or 02 numbers.) For information and support on inherited heart conditions.

Online community

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

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.

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.

46

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- 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 an extra 5,000 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.



INDEX

32
42
14, 19, 26, 30, 43
15, 18
18
25, 28
11
15
40
15, 16
15, 18
21
34
19, 28, 35, 36
19
35
30
13
05
05
05
13, 44
08
43
24
19
40

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.



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 HEARTREAT

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