



A lifetime of specialist care

Royal Brompton & Harefield **NHS**
NHS Foundation Trust

Your cardiac pacemaker





Contents

• Why do I need a pacemaker?	3
• How does a pacemaker work?	4
• Before the procedure to fit your pacemaker	5
• How is a pacemaker fitted?	5
• After your procedure	6
• Living with your pacemaker	8
• Contact details	10
• Useful information	11

This leaflet gives you general information about pacemakers, and what to expect before, during and after your pacemaker has been fitted. It does not replace the need for personal advice from a qualified healthcare professional. Please ask us if you have any questions.

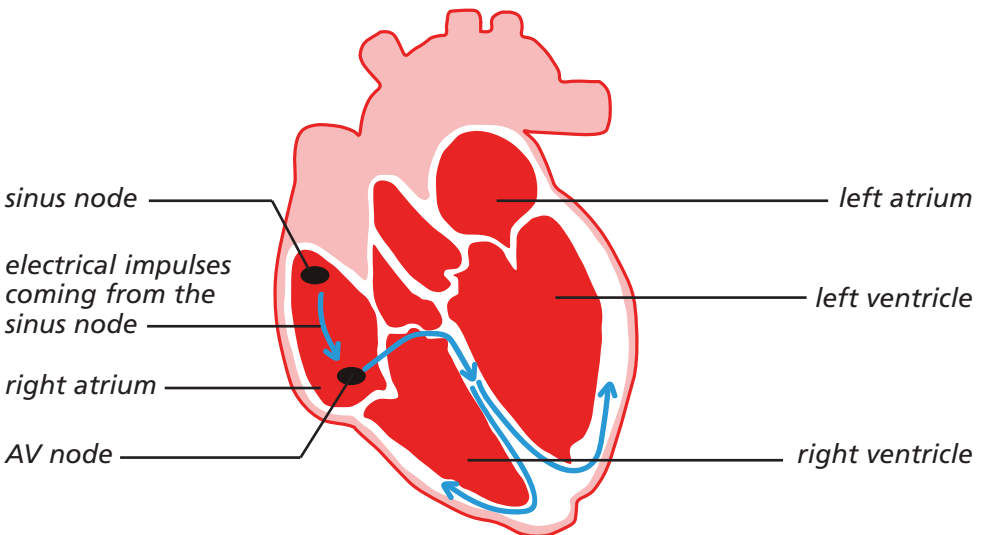
Why do I need a pacemaker?

Your doctor has suggested that you have a small electrical device called a pacemaker fitted to keep your heart from going too slowly.

Pacemakers are most usually fitted to treat patients with an abnormally slow heart rhythm. They can also benefit people who have heart failure (when the heart muscle does not pump blood as well as it should).

The heart is essentially a pump made of muscle which is controlled by electrical signals. Your heart has its own natural pacemaker – the sinus node (located in the upper right chamber of the heart). The sinus node sends regular electrical impulses to make your heart beat. These impulses are transmitted through the atrioventricular (AV) node and along tissue within the heart muscle causing the lower chambers of the heart to contract and pump blood out of the heart and around your body.

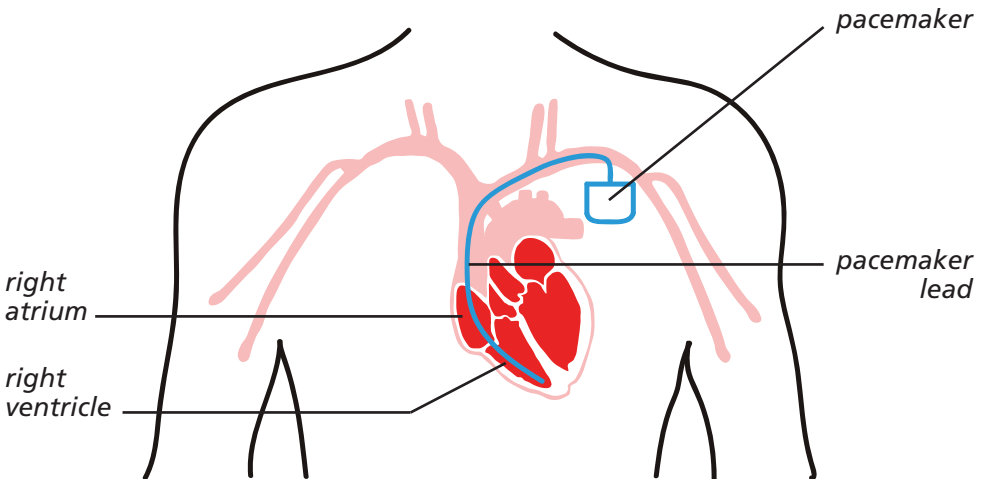
The job of a pacemaker is to take over the role of your sinus node and/or AV node by sending out electrical impulses.





How does a pacemaker work?

A pacemaker is a small device that consists of a pulse generator and one or more pacing leads that deliver electric pulses to the heart when your own system fails to work properly. The pulses stimulate the heart to contract and produce a heartbeat.



The type of pacemaker needed depends on your heart condition. A single chamber pacemaker has one lead, a dual chamber pacemaker has two leads and a biventricular pacemaker has up to three leads.

Most pacemakers are powered by a lithium battery which sits within the pulse generator and usually needs to be replaced every six to 12 years. The battery life will depend on how the pacemaker is programmed for your particular heart condition.

Before the procedure to fit your pacemaker

You will have a pre-admission appointment two to three weeks before your procedure.

At this appointment, you will meet a specialist nurse or cardiac physiologist who will go through your procedure in more detail and answer any questions you may have.

You will also have some tests:

- Blood tests – to check different areas of your general health.
- MRSA (meticillin resistant staphylococcus aureus) swabs – to check whether you have MRSA bacteria on your skin or in your nose. This is a routine test for patients admitted to the hospital. It is an important test that helps to stop the spread of MRSA (sometimes referred to as a 'superbug').

How is a pacemaker fitted?


You might have your pacemaker fitted as a day case or you might need to stay in hospital overnight.

A doctor, cardiac physiologist, radiographer and a nurse will be present during the procedure.

The procedure usually takes place in a cardiac catheter laboratory (cath lab) and takes between 30 minutes to an hour. A biventricular pacemaker can take longer.

In most cases, we use local anaesthetic to numb the area of the body where the pacemaker is being fitted. This means you will be awake during the procedure. However, if you feel anxious, we can give you a small amount of sedation to help you relax. You may experience slight discomfort or pressure while the pacemaker is being implanted, but it should not be painful.

We will ask you to lie flat on a special X-ray table. A small 5cm (2in) long cut will be made to fit the pacemaker.



The pacing lead will be passed along a vein and positioned correctly, using X-ray to guide it. We will test the pacemaker and connect it to the pulse generator. The pulse generator will then be placed under fatty tissue beneath the skin and the small cut stitched closed.

The stitches in your wound will usually dissolve over time, so you will not need to have them removed. We also use a type of clear glue to cover the wound.

After your procedure

After your pacemaker has been fitted you will be taken to the ward where you will need to stay in bed for a few hours. We will X-ray your chest to make sure the leads are in the correct position and to check for any complications. A cardiac physiologist will also take a photo of your wound site and check the function and settings of your pacemaker.

Before you leave the hospital, you will be given a pacemaker identification card with details of the make and model of your device. It is important to keep a copy of this with you at all times and to show it to medical, dental or other healthcare staff before a treatment or procedure, because on rare occasions some equipment may interfere with your pacemaker.

How do I take care of my wound when I leave hospital?

There may be some tenderness and bruising around the area where the pacemaker has been implanted. This may be more extensive if you are on a blood thinner. Keep this area clean and dry. The glue covering the wound is water resistant, so you may take a shower anytime from two hours after the procedure. However, you need to avoid soaking the wound, in a bath or going swimming, for example, until it is fully healed. The glue will peel off naturally.

Any procedure where the skin is broken carries a risk of an

infection. You will be given a course of antibiotics to take home to prevent infection.

You need to:

- Gently rotate your arm and shoulder (on the pacemaker side of your body) in small circles each day to gradually increase your arm movement over time.
- Avoid putting strain on your wound. You should not take part in any activity that involves lifting your elbow above shoulder level. You will need to avoid lifting any heavy objects and taking part in sports for four to six weeks.
- Check your wound for increased redness or tenderness, swelling or discharge. If you are worried about your wound, contact the pacemaker clinic (see contact details on page 10).


What do I do if I feel generally unwell?

If you experience shortness of breath, chest pain or swelling/bleeding from the wound in the first few days after going home, please contact the pacemaker clinic or a clinical nurse specialist. During evenings and weekends, or public holidays, please phone the hospital switchboard and ask to speak to the cardiology registrar on-call (see contact details on page 10).

You should always contact your GP first if you have a general medical problem. If your GP feels the problem is related to your heart condition, he/she can then refer you to us.

Will I need follow-up appointments?

Yes. You will need to have your pacemaker checked regularly. You will need follow-up appointments at the pacemaker clinic for the rest of your life. It is important you attend each one, so healthcare professionals can make sure that your device is programmed for your individual needs and that the battery lasts for as long as possible.



You will usually have your first follow-up appointments four weeks after your pacemaker is fitted and then after another three months. If there are no complications, we will arrange to see you for appointments once a year, until the battery is nearing the time when it will need replacing. We may then invite you for more frequent follow-up appointments until your pacemaker battery needs replacing.

Do I need to bring anything with me to follow-up appointments?

Yes. Please bring these with you to each follow-up appointment:

- any paperwork from recent hospital admissions
- clinic letters from your cardiologist
- and a list of your current medications.

Living with your pacemaker

A pacemaker does not restrict your lifestyle. If your check is satisfactory after the first month, you will be able to continue with your normal daily activities, taking into account the following advice.

Can I drive with a pacemaker?

You must inform the Driving and Vehicle Licensing Agency (DVLA) and your insurance company that you have been fitted with a pacemaker and you should not drive for the first week.

For more information, please see the DVLA website:

www.gov.uk/pacemakers-and-driving

Can household electrical items affect my pacemaker?

Pacemakers can be affected by strong magnetic or electrical fields. Problems with household electrical items are rare because

pacemakers have a metal casing to shield them from interference and can detect and remove unwanted electrical activity.

However, we recommend that you keep household electrical equipment such as wi-fi routers, mobile phones, hairdryers, microwaves and garden tools at least 15cm (6in) from your pacemaker during use.

Induction hobs (used for cooking) generate an electromagnetic field that may interfere with your pacemaker. If you have an induction hob, keep at least 60cm (2ft) between the top of the hob and your pacemaker.

Can I exercise with a pacemaker?

Yes – exercise should not affect your pacemaker. Please talk to your consultant for advice about when to start exercising.

There is a small risk of damage to your pacemaker from very forceful contact, so you should avoid heavy contact sports, such as kickboxing and rugby.

Can I travel abroad?

There are no formal restrictions to travelling abroad. Please remember to take your ID card with you to show to security staff and ensure that you have adequate medical insurance. Airport security staff may do a hand search or check you with a handheld metal detector. In some countries, the authorities will insist that you walk through the electronic security gates. If this happens, just walk through the gates. It is unlikely that your pacemaker will be affected.

If you plan to be away for a long time, contact the pacemaker clinic (see contact details on page 10) to arrange your follow-up appointments in advance.



Can I have an MRI scan?

You may be able to have an MRI (magnetic resonance imaging) scan. Most modern pacemakers and leads are MRI compatible. If you need MRI scans in the future, you must inform the scanning department that you have a pacemaker and present the ID card you received from the hospital where it was performed. You should also ask for advice when you attend the pacemaker clinic.

Contact details

Harefield Hospital

Pacemaker clinic **01895 828 553**
(Monday to Friday, 8.30am to 4.30pm)

Clinical nurse specialists **01895 826 580** or via the main hospital switchboard on **0330 12 88121**, and ask the operator for **bleep 6339** (available Monday to Friday, 9am to 5pm)

Royal Brompton Hospital

Pacemaker clinic **020 7351 2704**
(Monday to Friday, 8.30am to 4.30pm)

Clinical nurse specialists **020 7351 8364** or via the main hospital switchboard on **0330 12 88121**, and ask the operator for **bleep 1149** (available Monday to Friday, 9am to 5pm)

Useful information

For more general information about pacemakers, visit:

- Arrhythmia Alliance www.heartrhythmalliance.org
- British Heart Foundation www.bhf.org.uk

If you have concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call the Patient Advice and Liaison Service (PALS) on:

- Royal Brompton Hospital – 020 7349 7715
- Harefield Hospital – 01895 826 572

You can also email pals@rbht.nhs.uk. This is a confidential service.

Royal Brompton Hospital
Sydney Street
London
SW3 6NP
Tel: 0330 12 88121

Harefield Hospital
Hill End Road
Harefield
Middlesex
UB9 6JH
Tel: 0330 12 88121

Website: www.rbht.nhs.uk

إذا كنت ترغب في الحصول على ترجمة فورية لمضمون هذه الوثيقة إلى اللغة العربية، يرجى منك الاتصال بأحد مستخدمينا بجناح المصلحة التي يتم فيها استشفائك. أحد موظفينا سيسعى لترتيب إجراءات الترجمة وإتمامها في الوقت المناسب لك.

Brosurteki bilginin Türkçe tercumesi için tedavi görüyor olduğunuz bölüme bas vurunuz. Bölüm personeli tercümenin gerçekleşmesini en kısa zamanda ayarlayacaktır.

