Coronary heart disease is the UK’s single biggest killer.

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

But so many people still need our help. 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 living with 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.
What is a pacemaker?

A pacemaker is a small electrical device which is used to treat some abnormal heart rhythms which can cause your heart to beat too slowly or miss beats. Some pacemakers can also help the chambers of your heart beat in time.

How does a pacemaker work?

A pacemaker checks your heart rhythm all the time. If it senses that you have an abnormally slow heartbeat or a series of missed beats, it will send electrical signals to your heart to make it beat normally.

The hospital will set up your pacemaker in the best way for the heart condition your doctor is treating you for. A fixed rate pacemaker works all the time, but most pacemakers are set to work on demand. That means they only work when they need to.

If your pacemaker needs to be reprogrammed after it has been put in, this is usually done in the pacemaker clinic.

Why do I need a pacemaker?

You may need to have a pacemaker if:

– your heart’s natural pacemaker isn’t working properly
– the natural electrical activity of your heart is slower than it should be
– you are having fainting or dizzy episodes caused by a very slow heartbeat
– the lower parts of your heart are beating out of time
How is the pacemaker put in?

A pacemaker is made up of a small box which contains the battery and electric circuit and one, two or three leads (or wires). It usually takes about an hour to put in. You are most likely to be awake, but you will be given a local anaesthetic so you shouldn’t feel anything.

The doctor makes a small cut just under your collarbone (usually on your left side).

The leads are fed through a large vein and into your heart.

The ends of the leads are positioned so they are touching your inner heart muscle. This is so they can monitor your heart rhythm and correct it if that’s needed. Sometimes the leads are attached to the outside of your heart muscle instead, under the skin of your chest.
Once the leads are in place, the doctor will make a small pocket for the pacemaker box to sit in under the muscle or skin, close to the cut that they made. Then they attach the pacemaker box to the leads and close up the wound using either stitches or a special glue.

Most people go on a heart monitor to check their heart rhythm for a few hours after they have had their pacemaker put in. Your nurse will also take your blood pressure every so often and keep checking your wound to make sure it is not bleeding and there is no unusual swelling.

You should keep your wound covered with a dressing for a few days. If you have stitches, your nurse will tell you when you need to have them out. You may need to take antibiotics to try and prevent the wound from getting infected, but it’s still important to look out for signs of infection once you are home. Let your GP know as soon as possible if you notice anything unusual like more swelling, redness, pain or oozing from the wound.

You need to be careful not to put too much pressure on the arm nearest your pacemaker (usually your left arm) for a while after you get home.

You should also make sure you don’t lift that arm up too far. Your nurse will tell you the best way to sit yourself up and how far you can move your arm. This helps to prevent the pacemaker leads from moving before they settle into your heart.
Peter’s story

Peter was fitted with a dual-chamber pacemaker eight years ago.

“I have an intermittently slow heart rate. I saw specialists and we tried a number of treatments before the pacemaker.

Fitting it was a simple procedure. I had a nurse with me throughout, making sure that I was ok.

I gradually got used to it. I couldn’t drive for a little while, or lift my left arm to comb my hair while everything healed.”
“Knowing the pacemaker is there makes me feel more secure, but it doesn’t affect my day to day life. I don’t think about it anymore.”

Peter, supporter

Everyday life with a pacemaker
A pacemaker shouldn’t affect your day to day life. You may need to make a few small changes for a short time, such as not driving for a while and doing less physical activity. Your doctor or nurse will advise you and answer any questions you have.

How long will the battery last?
A pacemaker battery usually lasts between eight and ten years. The staff at your pacemaker clinic will keep a close check on the life of your battery and they will not allow it to run out fully. When the battery is running low you will need to go back into hospital and have a new pacemaker box fitted.

8-10 years
**Will electrical equipment stop my pacemaker from working?**

All pacemakers have a metal shell to protect them from other electrical signals so you can use most household equipment without any bother. But you do need to be careful around some equipment with magnets in it, like metal detectors.

**Be cautious**

If you are travelling through an airport, make sure you tell the security staff that you have a pacemaker so they don’t hold the metal detector over your pacemaker. For more advice speak to a doctor or nurse at your pacemaker clinic.
Use this space to make notes for discussions with your doctor.

For more information
You can order more information on pacemakers, including:

Pacemakers (booklet) – Also available in large print

bhf.org.uk/heart-health/

To order our booklets or DVDs:
call 0300 200 2222
e-mail orderline@bhf.org.uk
or visit bhf.org.uk/publications

Contact
For more information visit the British Heart Foundation website bhf.org.uk

Heart Helpline 0300 330 3311
(a similar cost to 01 and 02 numbers)
For information and support on anything heart-related.

Join us in the fight for every heartbeat.
For 50 years the British Heart Foundation has been funding life-saving heart research. Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease. But we need your support to continue this fight.

Visit bhf.org.uk to make a donation or find out more.