A pacemaker is a small battery-powered device, which paces your heart by sending an electrical pulse, telling your heart when to pump.

Each normal heartbeat begins in the natural pacemaker of your heart (the sino-atrial or SA node). If this is not working properly or there is a problem with the message getting through your heart, this can cause your heart to beat too slowly, too quickly or irregularly.

An artificial pacemaker can treat some abnormal heart rhythms. If your heart beats too slow or too fast the pacemaker will start pacing your heart to restore its normal rhythm.

A pacemaker is usually placed under your skin below your collarbone, normally on your left-hand side. Some pacemakers work on demand and others work at a fixed rate.

What is a pacemaker?

Why me?

You may have congenital heart block (a condition you were born with) that doesn’t allow the electrical message through from the top to the bottom of your heart. This can make your heart beat too slow.

You may have a congenital heart defect (i.e. born with a hole in your heart). If you have had heart surgery this can increase your risk of developing a heart rhythm problem.

There are different types of pacemaker to suit specific heart rhythm problems. To help decide which one is right for you, you may need to have some tests.

Will I feel different for having a pacemaker?

A pacemaker should make you feel less tired and increase your energy levels. It should reduce blackouts and feeling out of breath.

If you are very slim then sometimes you can see an outline but as pacemaker boxes are about the size of a matchbox, and not as thick, it isn’t always that obvious.

How do they do it?

You will be made sleepy or unconscious using anaesthetic drugs. The specialist team in the cath lab, including your electrophysiologist (heart rhythm doctor), will be making sure that you are breathing okay and you are kept safe during the procedure. The implant should take between 60-90 minutes to complete.

A small cut is made just below your collarbone and one or two wires are put into a vein into the right side of your heart. The pacemaker box is connected to these and sits in a pocket under your skin where the cut was made. The cut is then stitched up.

How long will it last?

A pacemaker battery can last between 5 and 10 years but it depends on how often it has paced your heart. If you are still growing, you may need to have longer leads implanted in the future.

What else to know

• Driving – following your implant you may need to inform the DVLA. Your nurse or physiologist will advise you. You will need to inform your insurance company.

• Avoid contact sports such as rugby or contact forms of martial arts.

• Mobile phones/MP3 players/games consoles etc - keep at least 23 cm away from pacemaker. Keep headphones at least 3 cm away from pacemaker and don’t let them dangle over your neck, even when not in use. Use cordless phones on ear furthest from pacemaker.

• Airport scanner – you can safely walk through the scanner but avoid the use of the hand-held metal detector. Have your identification card handy to show to security.

• Shops – don’t hang around the doorway – walk in and keep 1 m away from doorway.

• Sex/getting close – no risk to them.

You may have congenital heart block (a condition you were born with) that doesn’t allow the electrical message through from the top to the bottom of your heart. This can make your heart beat too slow.

You may have a congenital heart defect (i.e. born with a hole in your heart). If you have had heart surgery this can increase your risk of developing a heart rhythm problem.

There are different types of pacemaker to suit specific heart rhythm problems. To help decide which one is right for you, you may need to have some tests.
A normal heart rhythm

Each normal heartbeat begins in the natural pacemaker of the heart (the sino-atrial or SA node).

Arrhythmia (abnormal heart rhythm)

Sometimes the electrical system in your heart does not work as well as it should. This can cause your heart to beat too slowly, too quickly or irregularly.

Pacemaker fitted

A pacemaker can treat abnormal heart rhythms. One or two wires are put into a vein into the right side of your heart.