

# Pacemakers

## WHAT IS A PACEMAKER?

**A pacemaker is a small battery powered device, which paces your heart by sending an electrical impulse, 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 at a fixed rate.

### Why me?

You may have congenital heart block, a condition where electrical impulses are blocked from reaching the

bottom chambers of your heart (ventricles). This can make your heart beat too slowly.

You may have a congenital heart condition. This means that before you were born there was a problem with the development in the structure of your heart. If you have had heart surgery this can increase your risk of developing a problem with your heart rhythm. 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 the number of blackouts you have, and reduce the feeling of being out of breath. The outline of your pacemaker might show up more if you're very slim, but it's only around the size of a matchbox, so it isn't always obvious.

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 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.

## SURGERY & TREATMENT

### 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 make sure you are breathing okay and you are kept safe during the operation. 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.

## AFTER SURGERY

### 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 it at least 23 cm away from pacemaker.
- Keep headphones at least 3cm away from pacemaker and don't let them dangle over your neck, even when not in use. Use cordless phones on your ear that is furthest from the 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 1m away from the doorway due to the security scanners.
- Sex/getting close – your pacemaker is no risk to your partner.

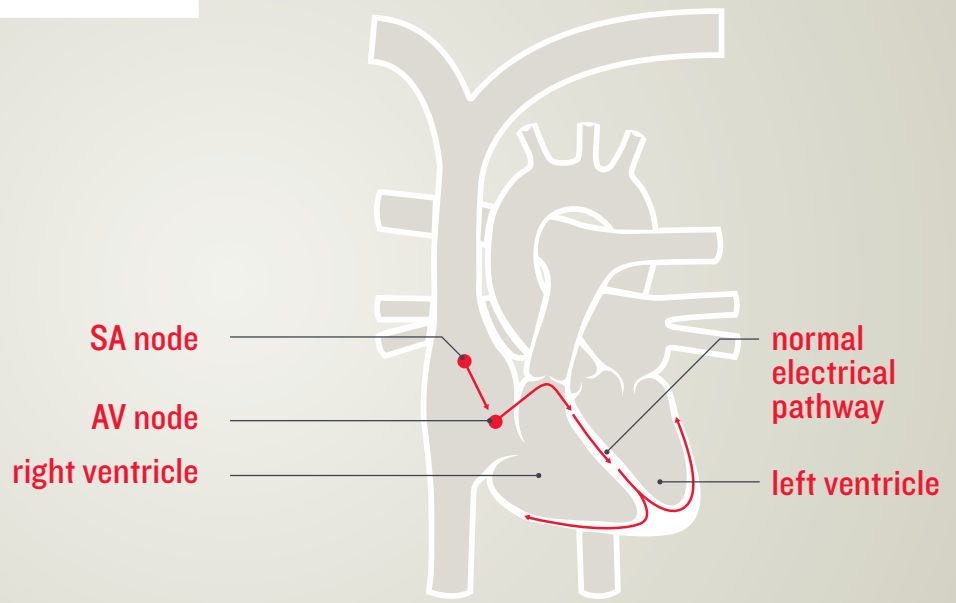
### Find out more about your heart and visit:

- [yheart.net/meet](http://yheart.net/meet)
- [heartrhythmcharity.org.uk](http://heartrhythmcharity.org.uk)

Revealing the facts  
about your condition

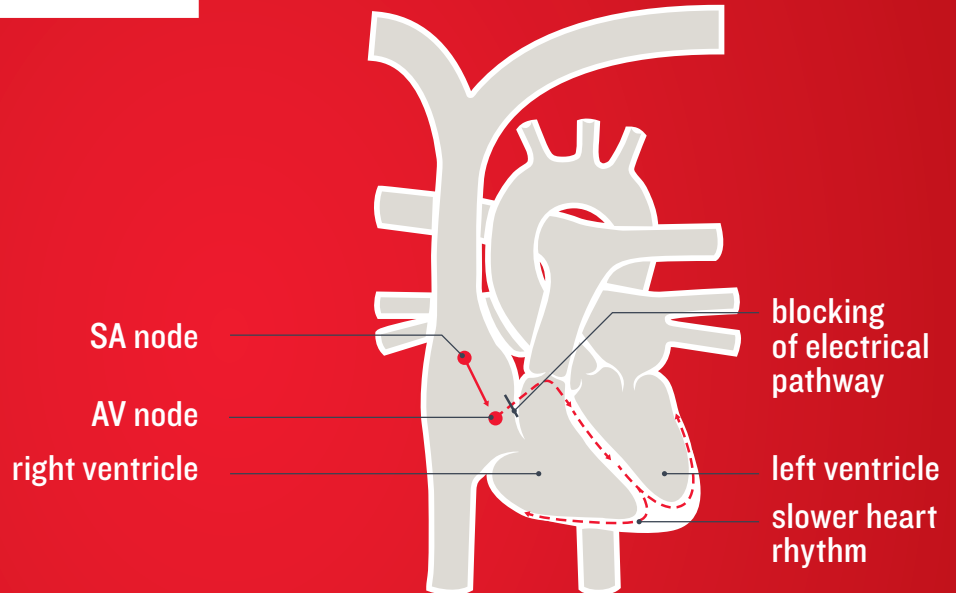
# A REGULAR HEART RHYTHM

Each regular 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 more wires are put into a vein into the right, and sometimes left, side of your heart.

