



British Heart Foundation

Implantable cardioverter defibrillators

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WHAT IS AN IMPLANTABLE CARDIOVERTER DEFIBRILLATOR?

An ICD is an Implantable Cardioverter Defibrillator. It is a small battery-powered device. An ICD can pace your heart if you have a very fast abnormal heart rhythm and it can also deliver a shock to save your life. It is used for people who have had or are at high risk of having a cardiac arrest.

A cardiac arrest is when your heart stops pumping blood round your body and you stop breathing normally. An electrical shock is sometimes needed from a defibrillator to bring back a normal heart rhythm. An ICD is usually placed under your skin below your collarbone, normally on the left-hand side.

How long will it last?

An ICD battery can last between 5 and 10 years but it depends on how often it has paced a fast heart rhythm, or had to give a shock. If you are still growing, you may need to have longer leads implanted in the future.

Why me?

Your heart pumps blood because the sino-atrial or SA node in the top of your heart sends a message down your electrical pathway telling your heart to beat. Sometimes the electrical system in your heart, does not work as well as it should which can cause your heart to beat too quickly. This can lead to a fast, life threatening heart rhythm – ventricular tachycardia (VT) or ventricular fibrillation (VF) – leading to cardiac arrest.

You may have an ICD because of a condition that runs in your family – Long QT syndrome, Brugada syndrome, CPVT, a cardiomyopathy, Short QT syndrome or idiopathic ventricular tachycardia. Or due to scarring of the heart after surgery for a congenital heart condition (this means that before you were born there was a problem with the development in the structure of your heart).

Will it show up?

The outline of your ICD might show up more if you're very

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.

slim, but it's only around the size of a matchbox, so it isn't always obvious.

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 that you are breathing okay and you are kept safe during the procedure. The implant should take between 1-2 hours to complete. A small cut is made not far below your collarbone and one or more wires are put into a vein into the right side of your heart. The box part (pulse generator) is connected to these and sits in a pocket under your skin where the cut was made. The cut is then stitched up. When you wake up the nurses will explain about being careful with your arm and how to look after the wound while it heals.

AFTER SURGERY

How will I feel about an ICD?

Most people are aware of having an ICD inside them, but get used to it quickly. Many people feel a bit worried

about what happens if it shocks. Make sure you speak to your specialist nurse or electrophysiologist about what you should do if your ICD shocks you, or if you're concerned about anything else.

What else to know:

- Driving - following your implant you may need to inform the DVLA and 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 ICD.
- Airport scanner – you can safely walk through the scanner but avoid the use of the hand-held metal detector.
- Medical/dental treatments – shouldn't affect ICD but tell your doctor/dentist.
- Shops – don't hang around the doorway because of the security scanners – keep 1M away from the doorway.
- Sex/getting close – no risk to your partner even if ICD shocks.

Find out more about your heart and visit:

- yheart.net/meet
- hearhythmcharity.org.uk

Revealing the facts about your condition

FIGHT FOR EVERY HEARTBEAT
bhf.org.uk



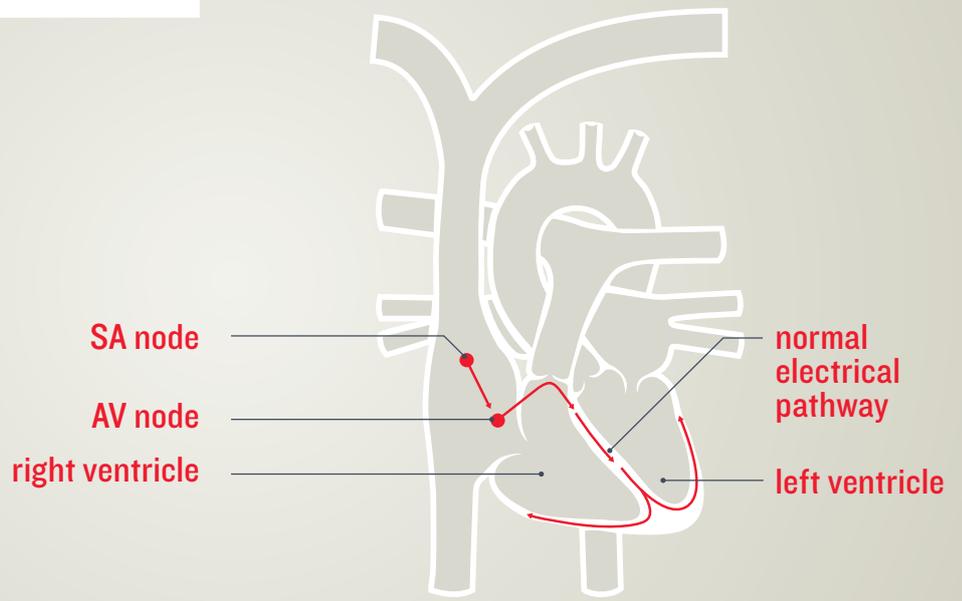
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Visit bhf.org.uk/publications for our booklet 'In charge of my future' for more information on living with an ICD.

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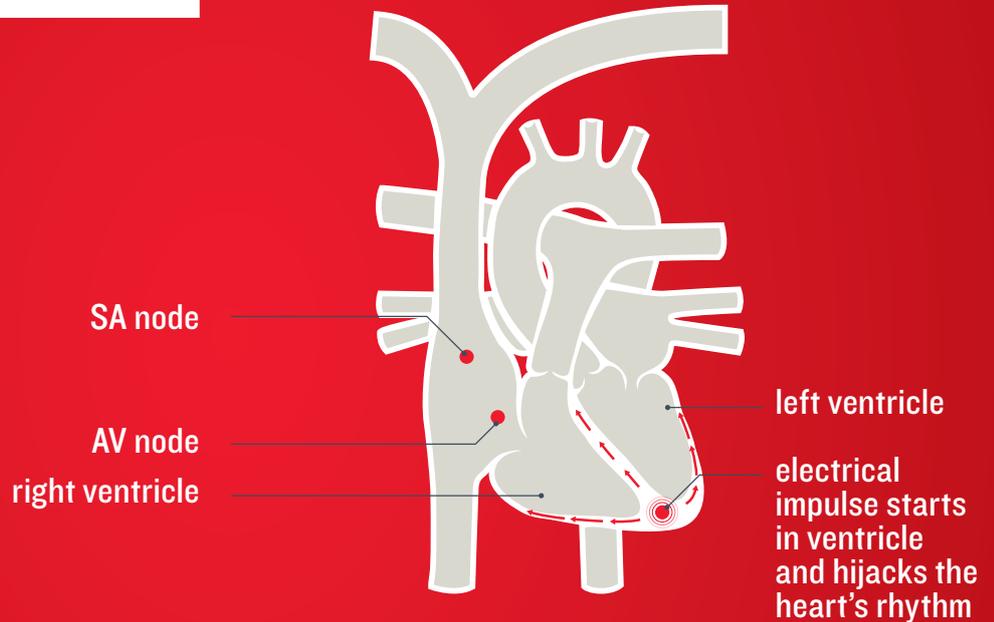
A REGULAR HEART RHYTHM

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



VENTRICULAR ARRHYTHMIA

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



ICD FITTED

An ICD can pace your heart and deliver a shock to get your heart back into a normal rhythm. One or more wires are put into a vein and into the right side of your heart. Sometimes, you may also have a lead on the left side too.

