Questions to Ask Your Doctor:

- Why do I need a heart device?
- What is an ICD?
- What is an S-ICD?
- What is the difference between an ICD? S-ICD and EV-ICD?
- Where/How will the device be located? (under the skin or under the muscle)
- Can the device move once implanted?
- What restrictions should I follow post implant, and for how long?
- How long should I allow for my recovery?
- How long until I can return to work?
- When can I return to exercise/sport after the implant?
- Will the procedure/device impact on my driving ability?
- Will the device impact on intimacy?
- Will I feel the device working?
- What is anti-tachycardia pacing? And what is its benefit?

Other questions to consider:

- *Will I feel pacing?*
- *Will I feel a shock?*
- *How do I know I have had a shock?*
- *What does a shock feel like?*

Want to Know More?

"Thank you for this helpful discussion guide; a great insight to prepare me for my procedure"

Sarah, Lincolnshire

If you have any questions, require support, advice, or additional information regarding patient resources and upcoming events, please contact our Patient Services Team:

Call:

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Email:

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or visit:

www.heartrhythmalliance.org

To view our patient resources, scan the QR code below:

@KnowYourPulse

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"I really didn't know what to expect and how I would manage with an implanted device; this little discussion guide has given me an overview of the EV-ICD"

Janet, Cumbria, UK

Arrhythmia Alliance
www.heartrhythmalliance.org

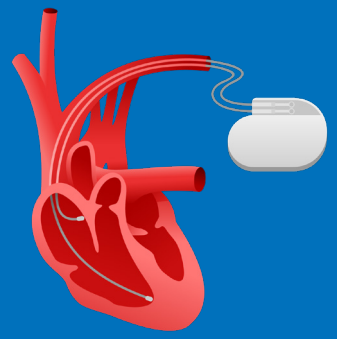
FOR PATIENTS & CAREGIVERS

ICD / S-ICD and EV-ICD

This Guide is to help offer support and advice to individuals who have been offered an implantable device

Discussion Guide

Questions to consider when you have been recommended to have an implantable device:



Why do I need an implantable heart device?

Individuals who have experienced either an extremely rapid heart rhythm (such as ventricular fibrillation\tachycardia) or if their heart rhythm is too slow (such as bradycardia) may be in danger of experiencing a sudden cardiac arrest (SCA), a condition where the heart can stop suddenly without warning.

To help control and stabilise the heart rhythm and sustain NSR (normal sinus rhythm), you may have been recommended an implantable device such as an ICD.

What is an ICD?

A heart device called an **implantable cardioverter defibrillator (ICD**) can be implanted to monitor the heart and if the rhythm is too fast the device will detect and correct. A discussion with your doctor can help determine if this is the right option for you.

An ICD system is comprised of a defibrillator and lead(s).

- A **defibrillator** monitors the heart and automatically delivers therapies to correct dangerously fast\slow heart rhythms as they develop.

- **Leads** are soft, thin, insulated wires. The leads carry the electrical impulse from the defibrillator to your heart and relay information about the heart's natural activity back to the device.

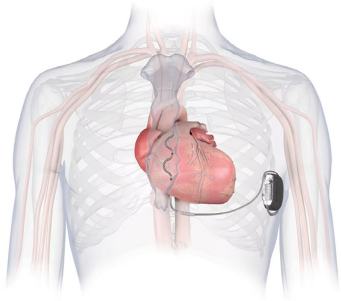
After the ICD system implantation, an external computer called a programmer, is located at your medical clinic. This is used to program the heart device and retrieve information that will assist your doctor in treating your heart condition. Your doctor will schedule follow-up monitoring checks, which may be done remotely.

What is an S-ICD?

A heart device called a **Subcutaneous Implantable Cardioverter Defibrillator (S-ICD)** is implanted to deliver an electrical shock to the heart to restore normal (sinus) rhythm if required. The S-ICD is placed under the skin on the left side of the chest, towards under the arm. It is connected to one insulated lead and placed just under the skin alongside the breastbone and senses the heart's electrical signals.

What is an EV-ICD?

The **Extravascular Implantable Cardioverter Defibrillator (EV-ICD)** system is made up of two parts the lead plus the device.



The device constantly monitors the heart to check if your heart is beating too fast, or irregularly, if so, the EV-ICD will send small electrical signals to correct the heart rhythm (known as *anti-tachycardia pacing/ATP*). If the heart rhythm continues to beat too fast, it will deliver another shock to reset and return to sinus rhythm. It can also monitor and treat a heart rhythm that is too slow by sending signals to the heart.

What is the difference between the devices?

A traditional implantable cardioverter defibrillator (ICD), otherwise known as a transvenous ICD (TV-ICD), has one or more leads that enter through your veins. An **ICD** has one or more leads that enter through the veins into the heart and across the valve, allowing the device to provide pacemaker functions as well as defibrillation. The **S-ICD** and **EV-ICD** have the same defibrillation (shock) function as the TV-ICD, however, the device sits on the side of your chest, and the lead goes on top of the sternum (S-ICD) or under the sternum (EV-ICD). EV-ICD also has anti-tachycardia pacing and pause prevention pacing (NOT bradycardia pacing like the TV-ICD). Be sure to ask your doctor what is suitable for your condition.

What restrictions should I follow post implant, and for how long?

Recovery varies on an individual basis. You should contact your doctor if you become aware of the wound feeling hot, leaking or swelling, or if you experience a fever or feel unwell. Wear loose clothing around the wound and speak to your doctor for advice regarding bathing and exercising. All the devices are suitable for all age groups under the recommendation and supervision of the individual consultant.

How long should I allow for my recovery?

You will need to allow yourself some recovery time; this will depend on your job and whether physical exertion is involved and whether you are fit to drive. It is important to take advice from your doctor.

When can I return to exercise/sport after the implant?

It is important to avoid lifting and over exertion in the early days following the procedure and you should discuss returning to any exercise or sport with your doctor before gradually re-introducing into your routine.

Will the procedure/device impact on my driving ability?

You may find some discomfort securing your seatbelt following the procedure. It is advised that a cushion or towel is used to protect the wound following the procedure. Once again, your doctor will provide a medical assessment to ensure you are fit to drive.

Will the device impact on intimacy?

The device should not impact on your personal relationships, however if you have any concerns, please discuss with your doctor.

Will I feel the device working? Will I feel a shock?

Each year, around three to four people in every one hundred with ICDs will receive a shock they did not need. Upon implant, your doctor will discuss a full 'shock plan' to ensure you are fully prepared for life with the device, this will be agreed between you. Many individuals may be unconscious when their ICD delivers a shock, but many are not and may feel it. This varies on an individual basis and will affect everyone differently. Many have described a 'sharp or painful kick in the chest'. The muscles in your chest and upper arm may tighten so will alert you in advance. Please try to remain calm, this is normal, and indicates the device is simply doing its job. Anyone in close contact with you at the same time as a shock being delivered, may feel a 'muscle spasm or a tingle'. It will not hurt the person touching **you.**