

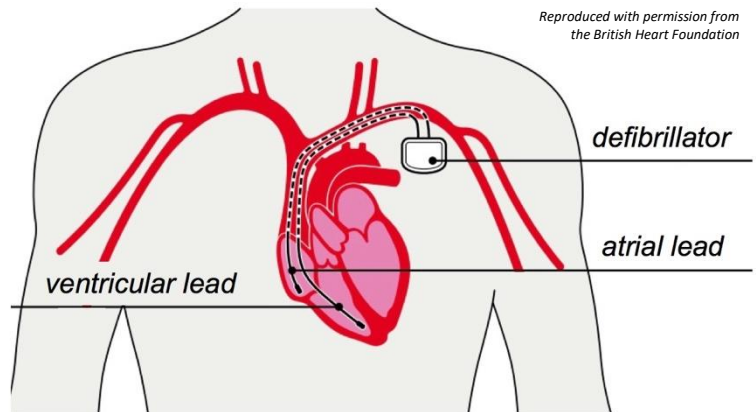
# Implantable cardiac defibrillator

## Procedure information for patients

Your doctor has recommended a procedure called an **implantable cardiac defibrillator (ICD)**. Please take some time to read this information sheet and discuss any questions or concerns you may have with a medical professional.

### What is a defibrillator?

An implantable cardiac defibrillator (ICD) system is designed to protect you against the effects of serious, rapid heart rhythms which could otherwise harm you. It is also effective at treating slow heart rhythms. It is made up of two parts, the defibrillator unit and the wires (leads). Depending on your condition, your doctor may recommend an ICD with one or two leads.



The leads are placed in contact with the inside of your heart. Once inserted, the ICD is “programmed” to your needs by the medical team using an external wireless device. The ICD is in “standby” until your heart rate falls below the pacemaker rate, at which point the device will step in and “pace” your heart with a small electrical impulse. Most patients are completely unaware of this. If your heart develops a dangerously rapid rhythm, the ICD can then deliver a series of rapid paced impulses or an electric shock to correct your heart rhythm.

### How is the defibrillator inserted?

Before the procedure, a small plastic tube (cannula) will be placed into one of your veins. You will be given antibiotics to reduce the risk of an infection. The procedure is usually performed under local anaesthetic and a mild sedative. A cut is made under the right or left collarbone and the pacing lead(s) are threaded down the vein into your heart. An X-ray camera is used so the doctor can see the leads. Once positioned in your heart, the leads are tested to make sure they are working properly. The pacemaker is then placed under the skin, connected to the leads and the skin sewn back together.

### What are the risks of the procedure?

In recommending this procedure, your doctor has balanced the benefits and risks of the procedure against the benefits and risks of not proceeding.

### Common risks and complications (more than 5 in 100) include:

- Bruising at the device site

**Uncommon risks or complications (between 1 and 5 in 100) include:**

- A lead can move. This would need to be put back into place by having a further, usually shorter procedure
- Significant bruising – this is more common if you are taking blood thinning medications
- Unexpected device failure. Either the battery or the lead may fail and would need to be replaced
- Receiving a defibrillator shock inappropriately. This may be avoided by altering medication or reprogramming the device.

**Rare risks or complications (less than 1 in 100) include:**

- Infection. This will need treatment with antibiotics and/or removal of the device
- A punctured lung. This may require a tube to be inserted into the chest to re-inflate the lung
- Blood clot in the vein in the shoulder
- Internal bleeding including bleeding into the space around the heart. This may need surgery to repair
- A very small increased lifetime risk of cancer from radiation exposure
- Blood clot in the lung (pulmonary embolism)
- A stroke. This can cause long-term disability
- Death as a result of this procedure is rare.

**What happens after the procedure?**

After the procedure you will have an X-ray of your chest area to check the leads have remained in position and the device will be electronically checked again. You will be advised you may not drive for at least a month following the procedure. In some cases, you may not drive for a longer period – you should discuss this with your cardiologist. You will be given more written information about what you should and shouldn't do after the procedure.

Depending on how your operation goes, you may be discharged home the morning after your operation or sometimes sooner. You will be given wound care instructions by the nursing team and information about follow-up at your local pacemaker clinic which normally occurs around one month later. If your ICD is operating well you will only need review in the ICD clinic once every six months.

**What happens next?**

Your doctor will speak to you about the procedure and answer any questions you may have. You will also be asked to sign a written consent form to confirm you are happy to have the procedure.