## Large print and other languages

This information can be made available in alternative formats, such as easy read or large print, and may be available in alternative languages, upon request. For more information, speak to your clinical team.

এই তথ্যগুলো সহজে পড়া যায় অথবা বৃহৎ প্রিন্টের মত বিকল্প ফরম্যাটে পাওয়া যাবে, এবং অনুরোধে অন্য ভাষায়ও পাওয়া যেতে পারে। আরো তথ্যের জন্য আপনার ক্লিনিক্যাল টিমের সাথে কথা বলুন।

Na żądanie te informacje mogą zostać udostępnione w innych formatach, takich jak zapis większą czcionką lub łatwą do czytania, a także w innych językach. Aby uzyskać więcej informacji, porozmawiaj ze swoim zespołem specjalistów.

Macluumaadkaan waxaa loo heli karaa qaab kale, sida ugu akhrinta ugu fudud, ama far waa weyn, waxana laga yabaa in lagu heli luuqaado Kale, haddii la codsado. Wixii macluumaad dheeraad ah, kala hadal kooxda xarunta caafimaadka.

Bu bilgi, kolay okunurluk veya büyük baskılar gibi alternatif biçimlerde sunulabilir, ve talep üzerine Alternatif Dillerde sunulabilir. Daha fazla bilgi için klinik ekibinizle irtibata geçin.

یہ معلومات متبادل فارمیٹس میں دستیاب کی جا سکتی ہیں، جیسا کہ پڑ ہنے میں آسان یا بڑا پرنٹ اور درخواست پر متبادل زبانوں میں بھی دستیاب ہو سکتی ہیں۔ مزید معلومات کے لیے، اپنی کلینکل ٹیم سے بات کریں'۔

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Tweet us **@NHSBartsHealth** Talk to us via <u>facebook.com/bartshealth</u> Leave feedback on NHS Choices <u>www.nhs.uk</u>

## Patient Advice and Liaison Service (PALS)

Please contact us if you need general information or advice about Trust services: <u>www.bartshealth.nhs.uk/pals</u>

**Reference: BH/PIN/677** Publication date: September 2023 All our patient information leaflets are reviewed every three years.

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Patient information

# Implantable Cardioverter Defibrillator (ICD)

## New implant information guide



#### What is an ICD?

An ICD is a sealed metal and plastic device, which contains a battery and electronic circuits. ICDs are offered to patients who have experienced or are at high risk of life-threatening arrhythmias.

The ICD is connected to your heart by one or more wires, called leads. These leads are fed along a large vein into your heart and implanted into the inside of your heart muscle. The leads are attached to the ICD and the ICD box is then implanted under your skin or muscle, usually in your upper chest, near your collarbone.

The ICD is constantly checking your heart's rate and rhythm. If it senses an abnormal, fast rhythm, the device will stop this in 1 of 2 ways.

1. Send small painless impulses down the wires to stop the rhythm.

2. Defibrillate (shock) to reset the heart back to normal.

The ICD also acts as a pacemaker. It can prevent the heart from going too slowly by sending small painless impulses to make the heartbeat regular.

#### **Device follow-up at Barts Heart Centre**

At implant the Consultant and Cardiac Physiologist will set up your ICD to work the best way for your heart condition. In the Device Clinic, the Cardiac Physiologist will view any episodes, test the ICD function, make any programming changes if necessary, and monitor the ICD battery.

You should expect your first check 1 month after your ICD implant. After this, your device should be checked at least every 6 months. On some occasions we may need to see you more frequently. If this is necessary it will be explained to you at your check.

RED Urgent- Call device clinic 9- 5 Mon-Fri	<ul> <li>Pus oozing from device site/ large swelling over device</li> <li>Shock from your device (follow page 2 instructions)</li> <li>Out of Hours: If not able to contact device clinic go to local A&amp;E</li> </ul>
YELLOW Caution- Give device clinic a call	<ul> <li>Device site is hot/ itchy</li> <li>Lost ID card</li> <li>Home monitor is not working (call contacts on page 1)</li> <li>Symptoms have got worse since device implant</li> </ul>
GREEN Normal	<ul> <li>Feel lethargic/ tired for few days after the procedure.</li> <li>Slight bruising/ small amounts of blood on dressing.</li> <li>Site is tender/ sore for a few weeks.</li> <li>Finding trouble lying on the side of the device in bed.</li> <li>Occasional palpitations</li> </ul>
	<ul> <li>Have someone with you for 24 hours.</li> <li>Take your medications as instructed on discharge.</li> <li>Take oral painkillers as necessary.</li> <li>Don't <ul> <li>Raise your device arm above shoulder height.</li> <li>Lift heavy items/push hard/ pull hard.</li> </ul> </li> </ul>

## **Remote monitoring:**

Your ICD can be monitored from home through a small transmitter that is kept in your home, usually in the bedroom. This transmits device information through mobile networks to a website which physiologists in the Device Clinic can view. No changes can be made to the device but any abnormalities that are detected can be viewed remotely. Remote checks can sometimes take the place of a face-to-face visit, saving your travel into clinic.

Troubleshooting contact numbers for remote monitoring in table below.

Boston Scientific	08456029283	Biotronik	49 30689052440
Medtronic	03301232112	St Jude	01789207632

# **Discharge information**

## ID card:

You will have been given an ICD identity card. This includes your details and the details of your ICD and leads. **You should always carry this card with you.** 

If you are admitted to another hospital, you should show this card to the healthcare professional looking after you. You will also be required to show this card when travelling through security at any airports. This will be discussed further in the 'travelling' section.

## What to do if you get a shock:

Some patients never receive a shock from their ICD. It is important to have a plan in case you have a shock (see table below) and know strategies for coping with an ICD shock. Everyone can have different symptoms prior to a shock, these range from palpitations, light-headedness, dizziness and passing out. If you experience these symptoms sit or lie down and make yourself comfortable. Close your eyes and try to focus on your breathing. Take long deep breaths and try to relax your mind. The shock is over in an instant. Afterwards follow the plan below.

Event	Symptoms after shock	Action
Receive 1 shock	Feel fine immediately	Call device clinic during Mon-Fri 9- 5 and arrange an appointment
Receive 1 shock	Chest pain/pressure, unwell, palpitations, dizzy, confused.	Call 999
Receive 2 or more shocks in 24 hours	Feel fine or not	Call 999

#### Wound:

For the first week keep your wound site clean and dry. Do not bathe the wound during this time. Your wound will have been closed with stitches. The table on the next page explains how long the dressing should be worn and when appointments with the GP should be made. You will be informed on discharge what you need to do and the type of stitch will be on your implant report.

Sutures	<u>Non-Diabetic</u>	<u>Diabetic</u>
Dissolvable	7 Days dressing off	10 Days dressing off
Non-	7 Days dressing off,	10 Days dressing,
Dissolvable	stitches removed at the	stitches removed at
	GP surgery	the GP surgery

## How long will my ICD last?

An ICD battery usually lasts between 7-12 years. As the battery life on your device reduces, the frequency of your ICD follow-up will increase. Before the battery runs out, we will schedule you for an ICD replacement procedure.

### Where can I get more information?

If you would like more information, advice and support regarding your cardiac device, please contact the Device Clinic. You are welcome to talk to a physiologist about your concerns or we have specialist arrhythmia nurses who you can arrange to see. Also, there are external services below who provide support for patients with cardiac devices such as Arrhythmia Alliance and British Heart Foundation.

## How to contact us:

Cardiac Physiologist	Device clinic: 0207 480 4899
Device Clinic, Clinic 5,	Arrhythmia nurses: 0203 765 8844
2 <sup>nd</sup> Floor, King George V,	Ward 3C: 0203 765 8061
Barts Heart Centre,	Ward 3AW: 0203 465 5531
West Smithfield	
London, EC1A 7BE	

When you get	Do:	
home	•	Relax and rest for 24 hours.
	•	Have access to a telephone.

Some electrical equipment that uses magnets can affect your device temporarily. Appliances such as induction hobs and hi-fi speakers use strong magnets in their function. Avoid getting too close to these appliances. For more advice speak to the ICD clinic.

### **Hospital equipment:**

Most equipment used in hospitals is safe, including X-rays, CT scans and mammograms. You should, however, avoid electrical nerve and muscle stimulators (TENS units) as they may cause interference with your ICD. If any of these treatments are suggested, or you are unsure, then contact the ICD clinic for advice.

Modern devices can be safe with magnetic resonance imaging (MRI) machines but not all are MRI compatible. If you are referred for a MRI scan, ensure the referring doctor is aware of your device and checks with the Device Clinic that MRI is safe for you.

Ensure you inform the healthcare professionals that you have an ICD before any procedures or investigations and take your ID card with you whenever you attend a hospital or dental appointment.

#### **Exercise / sex:**

Exercise should be limited post implant to allow time for the device site to heal and leads to be embedded. Sex is considered a moderate activity with a low risk, for the initial 2 weeks refrain from sexual activity, to allow for the device site to heal. After this period refrain from vigorous sexual activity before you first check. If you receive a shock during sex this will not hurt your partner. It is just like a normal shock, follow the table seen earlier on 'what to do if you get a shock'. Avoid wearing tight clothing over the wound until it has healed completely to avoid excess rubbing.

Infection at your wound site is a serious complication. If you notice any swelling, redness, pain or oozing from the wound, you must contact the ICD clinic **immediately**. It may be necessary for you to take antibiotics to prevent any infection from occurring or spreading.

You will probably be able to feel the ICD box under your skin and some little lumps nearby. These are the leads which are attached to the ICD. It is important that you don't try to move the box or leads. The device site can be uncomfortable for the next few weeks to many months after implant, as your body becomes accustomed to the device. You may have trouble lying on your device side, this is normal and does get better with time.

If you ever notice the device site looking silvery or can see any of the device urgently call the Device Clinic.

#### Arm:

Over the next few weeks after your device implant, extra tissue will grow around the leads in your heart which will prevent the leads from moving out of place. You need to be careful with the use of the arm nearest your ICD (usually your left arm) until your first appointment in device clinic. This will help stop the leads from becoming detached from the heart muscle.

You should make sure that you **don't lift your arm up above shoulder height**, don't reach across your body and no heavy lifting, pushing or pulling with the arm close to the ICD implant. When putting on clothes be careful to put your ICD side sleeve on first.



## **Driving:**

You can be fined up to £1,000 if you don't tell DVLA about a medical condition or treatment that affects your driving. You may be prosecuted if you're involved in an accident as a result. Further details and online forms can be found at

#### www.gov.uk/pacemakers-and-driving.

DVLA laws regarding driving and ICDs are constantly being updated. Please contact the DVLA for advice or visit their website below. We advise that you inform your insurance company that you have been fitted with an ICD.

www.gov.uk/guidance/cardiovascular-disorders-assessing-fitnessto-drive

## **Travelling:**

When traveling abroad you must inform the airport security staff that you have an ICD. Please show your ICD card to them, they should direct you to an ICD friendly scanner (X-ray) or to be patted down/ hand-held scanned.

Do not panic if required to walk through the large magnetic metal detectors. Ensure you walk through swiftly and DO NOT remain inside the scanner. You are likely to cause the detector to alert as your device is metal. It will not cause harm to the device.

Security staff may also decide to use a hand-held scanner. Ensure you tell them that you have an ICD so they do not hold the metal detector directly over your device.

When travelling abroad, be aware of your nearest hospital and ensure that your insurance company is aware that you have an ICD. If you are to be away for a long period, you can take your remote monitor with you. Please contact the Device Clinic about this.

## **Electrical equipment:**

Your device has a protective metal shell which safeguards it from any interference from most household electrical equipment. However, some electromagnetic interference may temporarily affect the settings whilst you are in contact with some devices. Most household mechanical and electrical devices will not affect your ICD for example, mobile phones, games consoles, Wi-fi, fridges, remote controls, televisions, electric razors, computers, microwaves etc. as long as they are in a good working order.

If you feel dizzy or experience palpitations whilst using an electrical appliance, you should move away from the appliance and phone the ICD clinic for more advice.