

# **Living with an internal cardiac defibrillator (ICD) to regulate your heart**

**The aim of this leaflet is to answer any questions you may have about living with an internal cardiac defibrillator (ICD). If you have any further questions or concerns, please speak to a doctor or nurse caring for you.**

## **When can I go back to my normal activities?**

You should be able to return to your normal activities as soon as you feel up to it. On the side of your body where the defibrillator has been inserted, you must not lift your arm above shoulder height for at least four weeks. You will also have to avoid lifting, pushing or pulling heavy objects for the first four weeks. Do not be afraid to move your arm normally, as this will prevent your shoulder from becoming stiff. You may feel a little tired or sore at first, so build up slowly to your normal routine.

## **When can I go back to work?**

This depends on your recovery and the type of work that you do. We usually recommend that you take between three and seven days off work, but this can vary. Please follow the advice given by your cardiologist. If you have any concerns about returning to work, please discuss these with any of the medical staff caring for you.

## **Can I wash my wound?**

Your wound will need little care. The stitches will dissolve by themselves after about seven days. Try to keep the area dry during this time. After a week, you can wash once a day with soap and water in the bath or shower. Do not use powders or creams on your wound while it is healing, as these can carry germs.

## **Will I be in pain?**

Your wound and the shoulder where the ICD has been implanted will be uncomfortable for the first few days. When you have returned home, you can take painkillers such as paracetamol, to help with any discomfort. Always follow the directions on the packet, or ask your doctor or pharmacist for advice.

## **Will I still need medicines for my arrhythmia?**

Many people who have ICDs also take medicines for their arrhythmia. Anti-arrhythmic medicines and the ICD can work together to make your arrhythmia easier to stop or occur less frequently. Arrhythmias can be treated, but usually not cured. Because of this, if you do need to take anti-arrhythmic medicine(s), you will probably always need to take them. Do not stop taking your anti-arrhythmic medicine(s) without the advice of your doctor.

## **What kind of exercises can I do?**

There are only a few exercise restrictions to keep in mind. For example, avoid contact sports such as judo or football, since they may damage the ICD or the leads. Before doing strenuous or repetitive upper-body exercises like weight lifting, speak to your cardiologist, nurse or cardiac physiologist.

Remember that if you had dizzy spells before the device was inserted, these may still occur. It is important not to put yourself in unnecessary danger. If you plan to do activities such as swimming in the sea or skiing, do not go alone.

## **Can I travel abroad?**

You will need to let your insurance company know that you have an ICD. The British Heart Foundation (BHF) has a list of companies that offer travel insurance for people with heart conditions. See page 7 for their contact details.

When you are planning your trip, please take into account the availability of medical care in the country you are visiting. Your ICD can be checked and programmed in most major hospitals around the world in an emergency, but you must make sure you carry your ICD identification card with you at all times. See page 6 for information on airport security detectors.

## **Is it possible to dislodge the ICD?**

Yes, although the ICD is firmly fixed in a pocket under your skin and the leads are well secured to the ICD. Contact or pressure applied to the ICD site should not affect how it works. If you fall or hurt yourself around the ICD site, please contact the cardiac physiologists for advice.

## **How long will my ICD last?**

The ICD is powered by a battery, sealed inside its case. The battery lasts between five and seven years, and is checked at each follow-up (usually between six and 12 months). Your cardiac physiologist will tell you when the battery runs down to a certain level, as you will need to have the ICD replaced. This will be done well before the battery runs out completely.

## **What to do if you have a shock**

Some people may never have a shock. For patients who do, often they are able to tell when their arrhythmia starts, as they may feel dizzy, light-headed or may have palpitations. This gives them some warning that the ICD may need to deliver therapy.

If you think that you are about to receive a treatment, you should sit or lie down on the ground. If anyone is around you let them know how you are feeling. If you do feel a shock, try to remain as calm as possible. If you were feeling unwell before the shock, for example dizzy or light-headed, you may feel much better afterwards. In this case, there is no need to treat the situation as an emergency. You will not need to call your doctor or an ambulance. You can carry on with whatever you were doing as soon as you feel better.

You may wish to phone the hospital and speak with someone for reassurance or advice if you are not sure what to do – the contact details are on the back page. If no one is available to take your call, please leave a message on the answerphone. Messages are checked several times a day and you will be contacted as soon as possible. Out of hours, please call your local A&E department for advice.

If you are still feeling unwell after the shock, or have more than one shock in a row, you must seek medical attention immediately. If you pass out and are alone, you should seek medical attention as soon as you recover. **Dial 999.**

If you are taken to your local hospital and this is not Guy's or St Thomas', the staff may not be able to check your ICD. However, they will be able to treat any serious ongoing arrhythmias and can contact us for further advice.

## ICDs and driving

There are two sets of rules that determine when you will be able to drive again.

### **If you are at risk of developing an arrhythmia but have not actually had an arrhythmia:**

- You **do not have to** let the Driver and Vehicle Licensing Agency (DVLA) know that you have had an ICD implanted.
- You **need to** inform your car insurance company. It is usually sufficient to phone them. However, we have found that a few companies require confirmation from the DVLA that no further action is needed. In this instance only, we would advise you to contact the DVLA and ask them to provide you with a letter stating that they have been notified and confirm the above.
- You will not be allowed to drive for one month after your ICD has been implanted.
- If you receive subsequent pacing or a shock from your ICD, you must inform the DVLA. You will not be able to drive for six to 24 months from the date of the arrhythmia, depending on the circumstances.

### **If you have already had a life-threatening arrhythmia, the following rules apply:**

- You must let the DVLA know that you have had an ICD implanted. You can do this by filling out a DEFIB1 form, available on the DVLA website ([gov.uk](http://gov.uk)) or from the Post Office.
- You must also inform your car insurance company.
- If the arrhythmia made you dizzy or caused a black out, you will not be allowed to drive for at least six months after your ICD has been implanted. If you did not experience any symptoms during the arrhythmia, you will not be allowed to drive at least one month after the ICD has been implanted, provided your cardiologist and DVLA are satisfied that set criteria have been met.
- If you receive subsequent pacing or a shock from your ICD, you may not be able to drive for further six to 24 months from the date of the arrhythmia, depending on the circumstances.

You will need to reapply for your licence before you can start driving again. We suggest you start this process before the six months have passed, as the paperwork may take some time to complete.

## Other rules for driving

These rules are for all ICD patients:

- You must not drive for one week after an ICD box (battery) change.
- You must not drive for one month if any of the leads are changed or revised.
- You must not drive for one month if your cardiologist or any other doctor changes your anti-arrhythmic drugs.
- If you are allowed to drive, your licence will be reviewed every year. On request, your cardiologist will provide the DVLA with details about your current cardiac status.
- If you continue to have pacing or shocks from your ICD, you may be permanently banned from driving or put on a five-year review.

It is important to remember that these regulations are in place for your safety and other road users. These regulations are constantly being reviewed and updated and may change in the future, but you are required by law to comply with them at all times.

### How long will the DVLA take to process my license?

The DVLA will send your cardiologist forms to get more information about your cardiac status. Your cardiologist will need to sign these forms to say they should issue you with a license. This all takes time, and as the number of people having ICDs implanted increases, this process may take longer. Therefore, we suggest you start reapplying for your license three to four months after your ICD was implanted or you had your arrhythmia.

#### DVLA address:

Drivers Medical Group, DVLA, Swansea SA99 1TU

t: 0300 790 6806

w: [www.gov.uk/health-conditions-and-driving](http://www.gov.uk/health-conditions-and-driving)

## Electrical interference and your ICD

Most electrical and mechanical devices do not affect your ICD. The generator has built-in protection from the electrical signals you are likely to come into contact with in your normal daily activities. There are, however, some things that produce very strong magnetic fields or electrical interference that may affect your ICD's function.

### Can I use my mobile phone?

Recent studies have suggested that if a mobile phone is held close to an ICD (within six inches or 15 cm), the phone may affect the operation of the defibrillator. This could be either because of radio signals produced by the phone, or because the phone contains a magnet.

As there are so many different mobile phones and because patients and their ICDs will each react differently, it is difficult to provide detailed advice that covers everyone. However, some general guidelines are:

- Keep a mobile phone at least six inches (15 cm) from your defibrillator.
- Hold your phone to the ear on the opposite side of where your ICD has been implanted.
- Some phones send out signals when they are turned on but are not being used (for example in the listen or standby mode). Therefore, do not carry the phone in a breast pocket within six inches of your ICD.

## Can appliances in my house interfere with my ICD?

Assuming they are in good condition and properly earthed, you can safely use:

- kitchen appliances, including microwave ovens, dishwashers, electric cookers, refrigerators, washers, dryers
- electric can openers, blenders, toasters, electric knives
- televisions, video recorders, personal computers, AM/FM radios, remote controls and garage door openers
- electric blankets, heating pads
- personal appliances such as curling irons or baby monitors.

You can use the following items, but avoid holding them closer than necessary to your implant site. This is because they contain motors that can create electromagnetic radiation and interfere with your device. Aim to keep them one foot (30cm) away from your ICD site:

- hand-held appliances with motors such as hairdryers and shavers
- light shop tools such as drills or table saws
- transmitters for radio-controlled equipment or toys.

**If you have any concerns, please contact a member of staff using the numbers on the back page.**

It is generally safe to work around spark-ignited internal combustion engines, such as lawn mowers, leaf blowers or cars but limit your exposure to ignition-system parts when they are in operation.

## Office equipment

Most office equipment is safe to operate as long as it is properly earthed and in good working order. This includes computers, electric typewriters, fax machines, pagers and copiers.

## General precautions

- Any electrical equipment, appliance or machine that you use should be in good working order and should be properly earthed. Watch out for frayed cords or sparks when the equipment is being plugged in or used. If you are unsure, always have a qualified electrician check the equipment.
- Do not carry magnets or products containing magnets close to your ICD. Depending on how strong the magnet is, aim to keep it six inches to a foot (15–30cm) away.
- When working with tools or appliances, be careful in situations where you could be injured if you become dizzy or receive a shock from your ICD.
- If you have concerns about any specific type of equipment or appliance, please ask us. If we do not know the answer, we will contact the company who made your ICD to ask them for specialist advice.

## Security systems

The following create electromagnetic fields and can interfere with your ICD:

- anti-theft systems or electronic article surveillance (EAS) systems. These are sometimes found at the entrances, exits or checkout counters of stores, libraries and banks. They send out signals that may interact with ICDs, but it is very unlikely that they will harm you or your device. Make sure you walk through the entrances and exits at a normal pace and do not stay in these areas for long.
- airport security metal detectors. Show security staff your ICD identification card. Walking through the metal detector archway will not harm your ICD, but it may set off the alarm. Pass through the archway at a normal pace and avoid lingering in the immediate area. The hand-held wand should not be used near your ICD.

## Industrial equipment

If you work in an environment with large generators, electric motors or other forms of electromagnetic equipment, please speak to your cardiac physiologist when you visit the outpatient department for your ICD check. They will then seek specific advice from the manufacturer for your situation. Arc welding is generally not advised.

## Medical equipment

Although most medical equipment will have no effect on your ICD, some may affect how it works. **Always tell the doctor or nurse treating you that you have an ICD.**

Patients with ICDs cannot have MRI (magnetic resonance imaging) scans. You can safely have diagnostic x-rays including fluoroscopy, dental and chest x-rays, computed tomography (CT) scans and mammograms. Ultrasonic dental cleaners should not affect your ICD.

If you need to use an electrical nerve and muscle stimulator (TENS unit), please contact the cardiac physiologists for advice.

## Recreation

Amusement park rides (and IMAX theatres) should not affect your ICD, but be cautious of rides that have large sparks, such as bumper cars. Tanning beds should not affect your ICD, but remember that tanning beds give out ultraviolet (UV) rays, which can cause skin cancer. Do not touch the antenna of an operating CB or ham radio.

## Will having an ICD affect my sex life?

The key lies in becoming comfortable with the ICD. Take time with your partner to discuss how you are both feeling. Choose a time when you are relaxed and choose a position that is comfortable. Just remember that your wound area may be tender and you may wish to protect it during the first couple of weeks following the operation.

If you have any ongoing problems, or if you or your partner would like any specific information or advice, please discuss them with your doctor.

## Is there any chance the ICD will give me a shock during sex?

Physical activity (of any kind) is not likely to cause the ICD to deliver therapy. If it does happen during sexual intercourse, stop and call us, just as you would if it happened during exercise. You can contact Catriona Schwendtner, cardiac nurse specialist on **020 7188 7520** (Monday to

Wednesday), or contact us using the details on the back page. Please do not fear that your partner will be hurt if the ICD delivers a shock during sexual activity – they may feel a tingle, but nothing more.

## **My spouse/family member is the patient. How can I help?**

If a family member or friend is the patient, it is natural for you to have the same fears and worries. There are several things that can help both of you cope with the condition. For example, listen when they want to talk. Your loved one needs reassurance that they have your support. Encourage and support them to get back to normal activities.

If you have any ongoing problems, or if you or your partner would like any specific information or advice, please discuss them with your doctor. We hold specialist clinics at the hospital, which you can be referred to if necessary – please use the contact details below to get in touch.

### **Contact us**

**The Cardiac devices information line** – for any questions or concerns you may have about having an ICD.

**t:** 020 7401 9249

**m:** 07770 581 872 (text messages only)

**e:** heartdevices@gstt.nhs.uk

#### **You can also contact:**

- the nurse case managers on **020 7188 0978**
- the cardiac rehabilitation team on **020 7188 0946**

They are available on weekdays from 9am to 5pm. If no one is available to take your call, please leave a message on the answerphone. Messages are checked daily and you will be contacted as soon as possible. Out of hours, for **urgent** help only, call or go to your local A&E department for advice.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

### **British Heart Foundation (BHF)**

BHF provides information on issues relating to heart disease.

Address: Greater London House, 180 Hampstead Road, London NW1 7AW

**t:** 0207 554 0000 (Monday to Friday, 9am to 5pm)      **w:** [www.bhf.org.uk](http://www.bhf.org.uk)

### **Pharmacy Medicines Helpline**

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

**t:** 020 7188 8748 9am to 5pm, Monday to Friday

### **Patient Advice and Liaison Service (PALS)**

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

**e:** 020 7188 8801 at St Thomas'

**t:** 020 7188 8803 at Guy's

**e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

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