

SAFETY & PRECAUTIONS FOR PATIENTS ON PACEMAKERS / CRT / ICD

You can use the following devices without hesitation:

- Television sets, radios, stereos, wireless headphones, or similar audiovisual equipment
- Cordless phones
- Hair dryers, electric shavers, or other electric devices in the bathroom
- Washing machines, vacuum cleaners, microwaves, dishwashers, and similar household appliances
- Computers, WLAN, fax machines, copiers, printers, etc.
- All kitchen devices
- Pulse measurement devices

Please note that some devices, such as headphones, are equipped with magnets, which may cause interference at short distance to the implant. Therefore, please maintain a distance of 3 centimeters between the headphones and the CHF therapy system.

You can use the phone without hesitation. If you want to use a cellular phone, you should talk to your physician. To prevent possible interference, you should always hold the cell phone on the opposite side from the implanted CHF therapy system. Even when not in use, you should not keep it close to the implant.

The following examination methods are harmless for you:

- X-ray examinations
- The usual dental treatment-such as drilling and ultrasonic tooth cleaning.

Can I use a cellular phone ?

Yes. You can use a cellular phone, but please take the following precautions: Discuss your individual situation with your physician. Do not carry your cellular phone close to your CHF therapy system, such as in a shirt pocket. Use the phone on the side opposite from the CHF therapy system.

Can I still use electric devices, such as microwaves, hair dryers, electric blankets, and massage devices?

Properly working household appliances can be used without hesitation. Your CHF therapy system is not affected by them. Necessary repairs should always be carried out by a professional to ensure proper functioning.

Can the CHF therapy system trigger allergic reactions ?

Normally it does not. Manufacturers of these devices uses materials that are well tolerated by the human body. These include titanium and other medically compatible and tested materials.

Does the implant impair my sex life ?

There is no need to restrict your sexual activity. Some patients are concerned because of an increased heart rate. The ICD is programmed to distinguish between a fast heartbeat and a tachycardia.

Metal detectors (airports, embassies, etc.)

Metal detectors are used at airports, embassies, and other locations to detect whether some one is carrying dangerous objects. Normally, metal detectors do not affect the functional capability of an ICD. Nevertheless, you should always show your patient ID card to security personnel. You will then be checked using a different method and led around the detector-controlled monitoring area.

Anti-theft devices (department stores, libraries, etc.)

Anti-theft devices, such as those used in department stores, libraries, and other locations, have rarely been known to interfere with the functional capability of an ICD. Nevertheless, such systems possess an interference potential, which may trigger unnecessary therapeutic action.

Take the following precautions:

- Move swiftly pas the entry and exit areas of department stores and cashier stations.
- Do not lean on the (sometimes concealed) alarm sensor devices usually installed on both sides of the entry and exit areas.

Mobile and cordless telephones

Reports about electromagnetic interference between mobile/cordless telephones and ICDs are extremely rare. ICDs are sufficiently well shielded against interference due to mobile/cordless telephones.

Nonetheless, please observe the following:

Always hold your mobile/cordless telephone to the ear opposite to the side where the implant is located. Hold the phone at least 15 centimeters away from the ICD.

Some mobile/cordless telephones transmit constant signals as soon as they are switched on, regardless of whether they are being used or not. Therefore, never carry a mobile/cordless telephone in a breast pocket, or attached to a belt with a 15 centimeter radius of the implant. Remember that electromagnetic interference is only temporary. Any such interference will cease, and the functional capabilities of the ICD will return to normal as soon as the mobile/cordless telephone is no longer in the vicinity of the implant.

UNSAFE

Among others, the following medical equipment and technologies should be avoided or used only at the discretion of the physician:

- Magnetic resonance imaging
- Ultrasound and electrical stimulation therapy
- External defibrillation
- High-frequency diathermy
- Radiotherapy
- Lithotripsy (e.g., crushing of kidney stones)
- Electrocautery (obliteration of blood vessels)
- Ablation (obliteration of tissue)
- Hyperbaric oxygen therapy (pressure chamber treatment)

Some ICDs are designed to undergo MR scans under specific conditions. Your ICD patient ID card will indicate if this is the case with your ICD. Please inform our physician of the possibility of undergoing an MR scan.

STRONG MAGNETIC FIELDS

Avoid environments and situations where you are exposed to strong magnetic fields.

The worst thing that could happen is an interruption of tachyarrhythmia monitoring while you are exposed to strong magnetic fields. As soon as you leave the magnetic field, the functions of the ICD will return to normal.

Magnetic fields are especially caused by strong electric currents. You should therefore take precautions when dealing with unfamiliar electrical devices.

You should always keep a safe distance from the following electrical systems or equipment:

- Motor vehicle ignition systems: Always maintain a distance of at least thirty centimeters between the ICD and a running internal combustion engine. The ignition coils operate at very high voltages. However, they only interfere with an ICD at close proximity.
- Loudspeakers: always maintain a distance of at least thirty centimeters between the ICD and all large loudspeakers.
- Headphones: Keep a distance of at least 3 centimeters between your ICD and headphones such as those of MP3 players.
- Electrically powered tools such as electric drills and cordless electrical screwdrivers: Always maintain a distance of at least thirty centimeters between the ICD and electrically powered tools.

- Amateur and CB radio equipment
- Large-scale radio and TV transmission installations
- Electric welders

Regarding the use of the following devices/equipment, please consult your physician first and pay attention to manufacturer's notes that may restrict the use for pacemaker or defibrillator patients:

- Machines that generate strong vibrations (electric drills etc.)
- Firearms
- Electrical devices with strong electromagnetic fields, high-voltage cables, transmission facilities for radio, television and radar, electric, unshielded ignition systems
- Electric welders
- Induction stoves
- Body fat scales