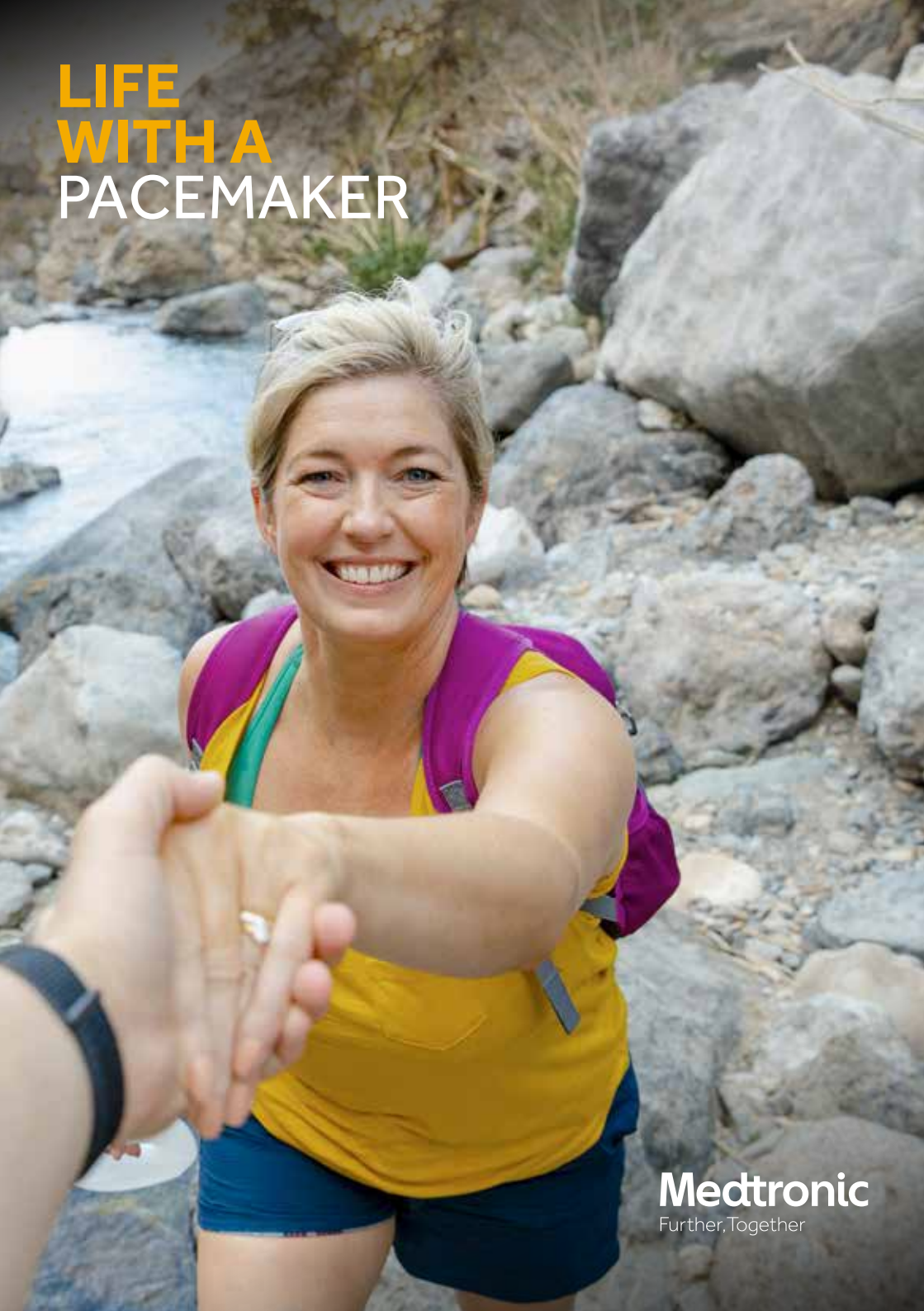
LIFE WITH A PACEMAKER



Medtronic
Further, Together

TABLE OF CONTENT

If you or someone you love has been diagnosed with a slow heartbeat (bradycardia), this brochure can help you understand your heart condition and treatment options.

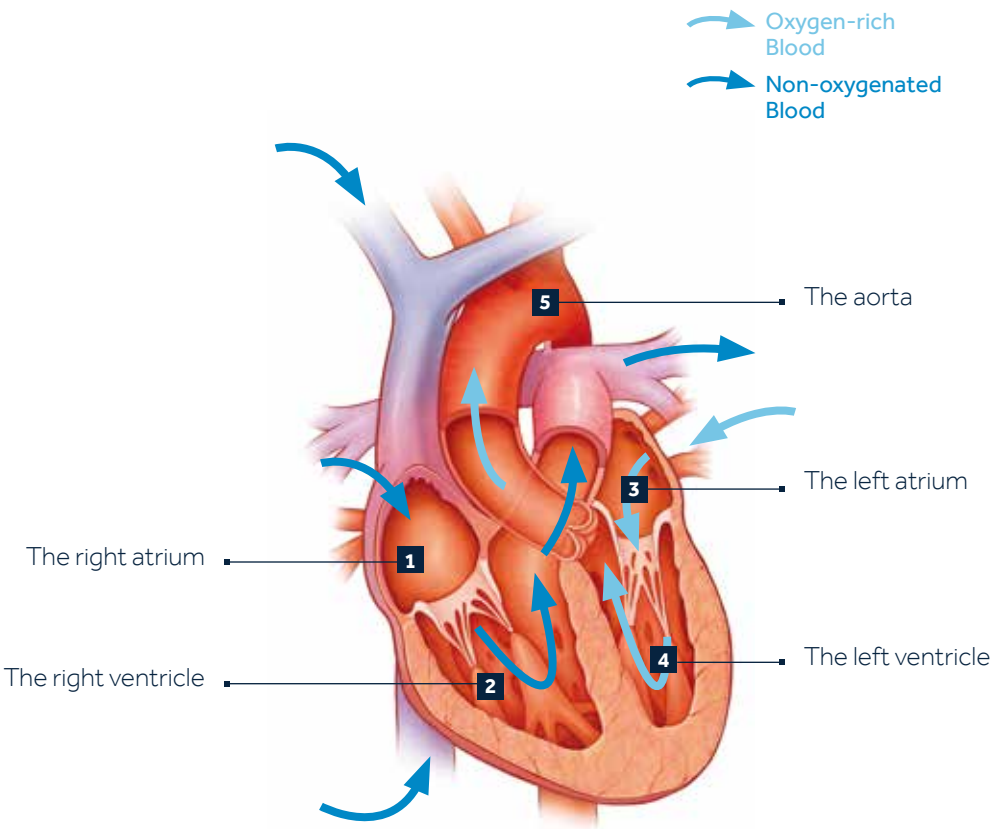
This brochure provides basic information about a slow heartbeat and pacemakers, including what to expect before and after you have a pacemaker implanted.

THE HEART

The heart is a fist-sized organ that acts as a pump to send oxygen-rich blood throughout the body. Regular, rhythmic electrical signals keep the heart pumping blood. The heart has four chambers:

- Two upper chambers – a right atrium and a left atrium
- Two lower chambers – a right ventricle and a left ventricle

The right atrium (1) takes in oxygen-depleted blood from the rest of the body and pushes it to the right ventricle (2) which then sends it to the lungs. The lungs oxygenate the blood which travels to the left atrium (3), and then onto the left ventricle (4), which pumps oxygen-rich blood to the rest of the body via the aorta (5).



WHAT IS BRADYCARDIA?

Bradycardia is a condition in which the heart beats **too slowly**. A healthy heart beats **60 to 100 times per minute,** pumping about **280 liters of blood** every hour. With bradycardia, the heart beats fewer than 60 times per minute. At that rate, the heart is not able to pump enough oxygen-rich blood to the body during normal activity or exercise.

SYMPTOMS OF BRADYCARDIA

When your heart beats too slowly, you may experience various symptoms. These symptoms help your doctor assess the severity of your heart condition and determine the appropriate treatment for you.

- Dizziness and fainting
- Chronic lack of energy
- Shortness of breath

CAUSES OF BRADYCARDIA

Bradycardia can occur for several reasons. Some common causes of bradycardia include:

- Congenital heart disease (condition you were born with)
- Certain illnesses or heart medications
- Natural aging process
- Scar tissue from a heart attack
- Sick sinus syndrome, also called sinus node dysfunction (the heart's natural pacemaker is not working correctly)
- Heart block (the electrical impulse that travels from the upper to the lower chamber of the heart is irregular or blocked)

DIAGNOSING BRADYCARDIA

Only your doctor can determine if you have bradycardia and, if so, how far it has progressed. To rule out or confirm the diagnosis of bradycardia, one or several diagnostic tests may be ordered, depending on the suspected heart rhythm problem.

These may include:

- Electrocardiogram (ECG)
- Exercise ECG, or stress test (measures your heart rhythm while you're engaged in a physical activity)
- Holter or event monitor
- External loop recorder
- Insertable cardiac monitor
- Tilt table test
- Electrophysiology study (EP study)

TREATING BRADYCARDIA

How bradycardia is treated depends on what's causing it. Bradycardia can be caused by an underactive thyroid (hypothyroidism), an electrolyte imbalance, or medicines you may be taking for certain conditions. Treating these problems with new medicines, or adjusting the doses of the medicines you are currently taking, may restore a normal heartbeat.

If treating these problems medically doesn't work, or if damage to the heart's electrical system causes your heart to beat too slowly, then you may be prescribed a pacemaker.

WHAT IS A PACEMAKER?

When people refer to a pacemaker, they are actually discussing a pacing system, which includes the pacemaker and leads.

- A traditional **pacemaker** is a small device that is implanted under the skin, typically just below the collarbone. The device delivers therapies to treat irregular, interrupted or slow heartbeats
- **Leads** are thin, soft, insulated wires about the size of a spaghetti noodle. The leads carry the electrical impulse from the pacemaker to your heart and relays information about the heart's natural activity back to your pacemaker

Recently **leadless pacemakers** have been developed. Unlike traditional pacemakers that are placed in the chest with leads running to the heart, they are implanted directly into the heart via a vein in the leg and are completely self-contained within the heart

Traditionnal pacemaker and lead

Leadless pacemaker

Vitamin

HOW DOES A PACEMAKER WORK?

A pacemaker is designed to mimic the heart's natural rhythm when there are disturbances, such as pauses in the natural rhythm. The pacemaker has two main purposes — pacing and sensing.

Pacing - A pacemaker will send an electrical impulse to the heart when the heart's own rhythm is too slow or is interrupted. This electrical impulse starts a heartbeat.

Sensing - A pacemaker will also "sense" (monitor) the heart's natural electrical activity. When the pacemaker senses a natural heartbeat, it will not deliver a pacing pulse.

THE PACEMAKER BATTERY

The energy needed for the pacemaker to work comes from a battery inside the pacemaker. How long your battery lasts depend on several factors. Some of these factors include the type of pacemaker you have, the nature of your heart condition, and how often your pacemaker provides therapy to your heart.

It could last over 13 years[1]. Because your pacemaker operates using a battery sealed inside the device, the entire device will need to be replaced when battery power falls to a low level. The leads only need to be changed in exceptional cases.

GETTING A PACEMAKER IMPLANTED

The procedure to implant a pacemaker does not require open heart surgery, and most people go home within 24 hours. Before the surgery, medication may be given to make you sleepy and comfortable. Generally, the procedure is performed under local anesthesia.

GENERAL STEPS OF AN IMPLANT PROCEDURE:

- A small incision, approximately 5 to 10cm long, will be made in your upper chest area, just below your collarbone
- One or two leads will be guided through a vein into your heart, and the leads will be connected to the pacemaker
  - A **single chamber pacemaker** means you have one lead inserted either into the lower right chamber (ventricle) of the heart or into the upper right chamber (atrium) of the heart
  - A **dual chamber pacemaker** means that you have one lead inserted into the upper right chamber (atrium) of the heart and one lead inserted into the lower right chamber (ventricle) of the heart
- The pacemaker settings will be programmed, and the device will be tested to ensure it is working properly to meet your medical needs
- The pacemaker will be inserted beneath your skin, and the incision in your chest will be closed

After your procedure, you will be given a pacemaker **identification card**. Always carry it with you as it contains important information about the implanted device.

Allow yourself a few weeks to get used to your pacemaker.

It is important to keep your wound dry for the first few days while it heals. Also avoid wearing tight clothing that could irritate your wound. You should not move the affected shoulder too energetically during the first few days so as not to impair the healing process. Avoid lifting heavy objects. Do not make sweeping movements with your arms, as these can cause undesirable tension on the leads. Consult your doctor in case of specific question.

REPLACEMENT PROCEDURE

The pacemaker has been developed to let your doctor know when the battery power falls to a low level. As the battery is an inherent component of the pacemaker, the entire pacemaker must be replaced during a replacement procedure. The surgeon makes an incision over the old scar and removes the old device. The electrodes are fastened securely and, after they have been checked, a new device is connected, tested and inserted into the existing skin pocket. The leads only need to be changed in exceptional cases.

FOLLOW UP CARE AND MONITORING

Your doctor will set follow-up appointments. During such follow-ups, you should not only mention the symptoms that may have occurred, you should also take this opportunity to ask any questions you may have and talk about your concerns and potential fears.

The follow-up appointments enable the pacemaker to be thoroughly checked. During these check-ups, your doctor may:

- Monitor the battery status of the pacemaker device
- Check the leads to determine how they are working with the pacemaker and your heart
- Review and adjust (if needed) your device settings to ensure they are programmed appropriately for your medical needs

This is done through a **programmer**, a small computer or tablet kept at your doctor's office. Your doctor will use the programmer to retrieve information stored in your pacemaker.

In addition to these appointments, you should call or visit your doctor if the scar becomes red, swells or moist.

REMOTE MONITORING OF YOUR PACEMAKER

We understand it is important to stay connected to your care team from the comfort of your home or wherever you're traveling - **remote monitoring*** allows for this flexibility.

Today, millions of people implanted with heart devices are remotely monitored. Remote monitoring has been shown to:

- Communicate any heart rhythm and device changes which require attention
- Reduce hospitalisations and ER visits
- Increase Quality of Life
- Provide you with a sense of security and peace of mind

HOW REMOTE MONITORING WORKS

A small **bedside monitor or an app on your smartphone/tablet** is used to send information from your pacemaker to your clinic. Depending on your pacemaker, you will either send information via the monitor when your doctor asks you to or information will be sent automatically when scheduled by your doctor. Once received, your clinic can review your information on a secure website. Remote monitoring provides easy access to information that allows your doctor to:

- Manage your heart condition
- Monitor your implanted heart device
- Obtain information from your implanted heart device on an as-needed basis

Your pacemaker has built-in safeguards that protect your device and your device data to prevent any outside parties from accessing your device (often referred to as "hacking"). Your pacemaker encrypts any data that it sends to your clinic. Your pacemaker can only be programmed by your doctor using the programmer in their office.

*subject to local availability

MRI SCAN ACCESS

A magnetic resonance imaging (MRI) scan is a type of diagnostic that creates an internal view of the body. Traditionally, most pacemakers are not considered safe in an MRI environment because the MRI could change the settings, temporarily affect the normal operation of, or potentially damage the pacemaker. Medtronic recent pacemakers are approved for use in the MRI environment, having a unique design developed so that under specific conditions, people may safely undergo MRI scans.

Your doctor should discuss all potential benefits and risks of an MRI scan with you.

THE PACEMAKER IN YOUR DAILY LIFE

Most people adjust rapidly to their pacemaker. Once the wound has completely healed, there is no problem with taking walks, working in the garden, playing sports or bathing. However, there may be certain activities your doctor will ask you to avoid, like rough contact sports. Be sure to discuss your activity and lifestyle goals with your doctor to find a plan that works best for you.

Speak with your family and friends about the pacemaker as it can make you feel more secure.

Support groups and associations can be of valuable assistance.

Pacemakers are built with protective shields, so the majority of items that you use or come into contact with will not affect the normal operation of your pacemaker.

However, items that generate or use electricity, or transmit wireless signals have electromagnetic fields around them. **Electromagnetic compatibility** is the relationship between these electromagnetic fields and your pacemaker. If the electromagnetic fields surrounding an item are too close to your pacemaker - and your device happens to detect these fields - this may temporarily affect its normal function. For this reason, we recommend you only use items that are in good working condition. In addition, we recommend you maintain a minimum distance between certain items and your pacemaker. This will help to avoid any temporary effect on your heart device.

What to do if you think an item is affecting your heart device?

If you feel dizzy, lightheaded or a change in heart rate, simply release whatever you're touching or move away from it. Any temporary effect is unlikely to cause reprogramming or damage to your pacemaker. Your device is designed to return to normal operation. Of course, if your symptoms continue or do not improve, contact your doctor as soon as possible.

COMMONLY ASKED QUESTIONS

USE OF A CELL PHONE

Mobile devices are safe to use as long as you maintain proper distance between them and your pacemaker. When using a cell phone, tablet computer or other mobile device, keep the device 6 inches/15 centimeters from your pacemaker as it could create interference. It is recommended to use your phone on the ear opposite your pacemaker and to avoid placing the cell phone in a pocket near your pacemaker.

ACTIVITIES

The goal is for you to lead a normal life as soon as possible. Generally, your device will not keep you from most **activities and hobbies** (e.g., bowling, golfing, playing tennis, gardening, fishing, etc.) However you should always discuss your underlying condition with your doctor to confirm.

Most people are able to return to **work** after device implant. You and your doctor will make this decision. The timing will depend on many things, including the type of work you do.

Intimacy is a normal part of life. We understand people resume sexual activity when they feel comfortable.

ANTI-THEFT DETECTORS AND AIRPORT SECURITY SYSTEMS

It is unlikely that your pacemaker will be affected by metal detectors (walk-through archways and hand-held wands) or full body imaging scanners (also called millimeter wave scanners and 3D imaging scanners) such as those found in airports. To minimize the risk of temporary interference with your pacemaker while going through the security screening process, do not stop or linger in a walkthrough archway; simply walk through the archway at a normal pace. If a hand-held wand is used, ask the security operator not to hold it over your implantable device and not to wave it back and forth over your pacemaker. You may also request a hand search as an alternative.

If you have concerns about these security screening methods, show your device ID card, request alternative screening and then follow the instructions of the security personnel.

TRAVELLING

Consult your doctor in advance of undertaking long journeys. They can provide you with the addresses of hospitals in the countries you are visiting in case you need to find a hospital in an emergency situation. They can also help you to find a cardiologist in these hospitals for a follow-up visit if needed.

DRIVING

Talk to your doctor about the restrictions that may apply to you.

HOUSEHOLD APPLIANCES

Most household appliances are safe to use as long as they are properly maintained and in good working order. This includes microwave ovens, major appliances, electric blankets and heating pads.

MAGNETS

Even though most electromagnetic fields in the home environment will rarely affect the function of your pacemaker, it is recommended you keep any item containing magnets away (at least 6 inches/15 centimeters) from your device as it can temporarily affect the operation of your pacemaker. You may not always know if an item has a magnet in it. However, if you use household items as they are intended, and they are properly maintained, they should have no effect on your device. This includes microwaves, kitchen appliances, cordless phones, radios, televisions, video games, CD players, hair dryers, electric shavers, electric toothbrushes, electric blankets, leaf blowers, lawn mowers, garage door openers, computers, children's toys and small shop tools.

If you mistakenly place a magnet too close to your pacemaker, simply move the item away.

Removing the magnet returns the pacemaker to its previous, normal programming. The use of magnetic mattress pads and pillows is not recommended since it would be difficult to keep a 6 inches/15 centimeters separation from your device.

WELDING AND CHAINSAWS

Unlike most other household power tools, welding with currents above 160 amps may have a higher tendency to temporarily affect the normal function of your pacemaker.

It is recommended you avoid using welding currents above 160 amps.

Follow the safety precautions below to minimize the risk of interfering with your pacemaker while welding with currents under 160 amps.

- Work in a dry area with dry gloves and shoes
- Maintain a 2-foot (60 centimeter) distance between the welding arc and your device
- Keep the welding cables close together and as far away as possible from your heart device. Place the welding unit approximately 5 feet/1.5 meters from the work area
- Connect the ground clamp to the metal as close to the point of welding as possible. Arrange the work so the handle and rod will not contact the metal being welded if they are accidentally dropped
- Wait several seconds between attempts when having difficulty starting a weld
- Work in an area that offers firm footing and plenty of room for movement
- Work with an informed person who understands these suggestions

Since welding equipment may temporarily affect the normal operation of your heart device, any decision you make to use this equipment should be made in consultation with your heart doctor.

Your doctor can advise you as to the degree of risk these responses pose for your medical condition. Aprons or vests will not effectively shield your device from the electromagnetic energy generated by welding equipment.

The electromagnetic energy generated by a chainsaw is similar to other electric and gasoline powered tools. If electromagnetic interference occurs with your pacemaker and you experience symptoms such as becoming dizzy or lightheaded, a running chainsaw may present a higher risk of injury to you than other power tools.

Follow the safety precautions below to minimize the risk of interfering with your pacemaker while using a chainsaw:

- Maintain a 6-inch/15 centimeters distance between the motor of an electric chainsaw and your pacemaker. Also, be sure the equipment is properly grounded.
- Maintain a 12-inch/30 centimeters distance between the components of the ignition system of a gas-powered chainsaw and your pacemaker. Also, it is better to use one that is built with the spark plug located away from the hand grips
- Immediately stop cutting and turn off your chainsaw if you start feeling lightheaded or dizzy
- Do not work on the engine while it is running
- Do not touch the coil, distributor or spark plug cables of a running engine

RECOMMENDED PRECAUTIONS

The following tables provide a summary of recommended precautions for different categories:

- Household & Hobby Items
- Tools & Industrial Equipment
- Communications & Office Equipment
- Medical & Dental Procedures

HOUSEHOLD & HOBBY ITEMS

Most household and hobby items are unlikely to affect your heart device when the items are in good working condition, used as intended, and the recommended distances are maintained. For items that transmit power through an antenna, it is recommended that you follow the noted distances between the antenna and your implanted heart device.

SPECIAL CONSIDERATIONS

Maintain at least the recommended distance between the item and your heart device:

12-inch/30 centimeters distance

- Car/Motorcycle — from components of ignition system
- Electric Fence
- Transformer Box (green box in yard)

2-foot/60 centimeters distance

- Beach Comber Metal Detector—from search head
- Induction Cooktop Stove

Not Recommended

- Ab Stimulator
- Electronic Body Fat Scale
- Magnetic Mattress Pad/Pillow

MINIMAL RISK

Maintain at least a 6-inch/15 centimeters distance between the item and your heart device:

- Electric Grocery Cart/Golf Cart—from motor
- Electric Kitchen Appliances—hand-held (electric mixer or knife)
- Electronic Pet Containment Fence—from collar, remote and base antenna
- Electric Shaver—corded
- Electric Toothbrush Charging Base
- Exercise Bike—from magnet in wheel
- Hair Dryer—hand-held
- Hand-Held Back Massager
- Magnetic Therapy Products
- Radio-Controlled Items—from antenna
- Sewing Machine/Serger—from motor
- Small Magnet (household magnet)
- Speakers
- Tattoo Machine
- Treadmill—from motor
- Ultrasonic Pest Control Device
- Vacuum Cleaner—from motor

NO KNOWN RISK

If the item is used as intended and in good working condition, there is no known risk:

- Battery Charger—for household batteries
- Casino Slot Machine
- CD/DVD or Recorder
- Curling Iron
- Dishwasher
- Electric Blanket
- Electric Guitar
- Electric Toothbrush
- Electronic Weight Scale
- Garage Door Opener
- Hair Straightener
- Heating Pad
- Hot Tub
- Ionized Air Filter
- Iron
- Kitchen Appliances —small and large (blender, can opener, refrigerator, stove, toaster)
- Low Voltage Residential Power Lines
- Massage Chair/Pad
- Medical Alert Necklace
- Microwave Oven
- Remote Control (CD, DVD Player, TV)
- Salon Hair Dryer
- Sauna
- Shaver/Trimmer— battery powered
- Tanning Bed
- Television

TOOLS & INDUSTRIAL EQUIPMENT

It is important that your power tools and/or equipment be in good working order and properly wired (three-prong plug, if applicable) and used as intended by the manufacturer of the product. It is recommended that corded electrical items be plugged into a safety outlet device called a ground fault circuit interrupter (GFCI or GFI).

SPECIAL CONSIDERATIONS

Maintain at least the recommended distance between the item and your heart device:

12-inch/30 centimeters distance

- Boat Motor
- Car Battery Charger
- Gasoline Ignition Systems—from components of ignition system
- Gasoline Powered Tools—from components of ignition system (lawn mower, snowblower, weed whacker, chainsaw)

2-foot/60 centimeters distance

- Bench Mounted/Free Standing Tools—for motors 400 horsepower or less (air compressor, drill presses, grinder, pressure washer, table saw)
- Jumper Cables
- Welding Equipment (with currents under 160 amps)

Not Recommended

- Welding Equipment (with currents over 160 amps)

MINIMAL RISK

Maintain at least a 6-inch/15 centimeters distance between the item and your heart device:

- Circular Saw—skill saw
- Drills—battery and electric powered
- Electric Chainsaw
- Grinder (hand-held)
- Hedge Trimmer—electric powered
- Lawn Mower— electric powered
- Leaf Blower—electric powered
- Reciprocating Saw (Sawzall™*)
- Router
- Sander
- Screwdriver— battery powered
- Soldering Gun
- Weed Whacker—electric powered

NO KNOWN RISK

If the item is used as intended and in good working condition, there is no known risk:

- Calipers—battery powered
- Flashlight—battery powered
- Laser Level
- Soldering Iron
- Stud Finder

COMMUNICATIONS & OFFICE EQUIPMENT

Guidelines for safe operation of communications and office equipment include such factors as transmitting power, frequency and antenna type. For items that transmit wireless signals through an antenna, it is recommended that you follow the noted distances between the antenna and your implanted heart device.

SPECIAL CONSIDERATIONS

Maintain at least the recommended distance between the item and your heart device:

12-inch/30 centimeters distance

- Amateur Radio, Ham Radio, Marine Radio, Walkie Talkie —between 3-15 watts —from antenna
- Citizens Band (CB) Radio—5 watts or less—from antenna
- Uninterrupted Power Source (UPS)

2-foot/60 centimeters distance

- Amateur Radio, Ham Radio, Marine Radio, Walkie Talkie —between 15-30 watts—from antenna

MINIMAL RISK

Maintain at least a 6-inch/15 centimeters distance between the item and your heart device:

- Amateur Radio, Ham Radio, Marine Radio, Walkie Talkie —3 watts or less—from antenna
- Cellular Phone—3 watts or less—from antenna
- Cordless Headphone Sending Unit (i.e., T V Ears™*)
- Digital Music Player (iPod™*) —transmitting
- Disney Magic Bands (6" from band reader, band itself has no known risk)
- Electronic Reader/Reading Devices
- Electronic Tablets (i.e., Kindle™*, iPad™*, Surface™*)
- Home Wireless Electronics—from antenna
- On Star™* Technology—from antenna
- Remote Keyless Entry—key fob (such as Smart Key)
- Remote Car Starter
- Smart Meter (utility companies)
- Security Badge Wall Scanner
- Wireless Communication Devices (computers, headsets, modems, routers, smartphones, Bluetooth™*)
- Wireless Controllers (video game consoles, Xbox™*, Playstation™*, Nintendo™*)

NO KNOWN RISK

If the item is used as intended and in good working condition, there is no known risk:

- Activity bands (FitBit™*, Body Bug™*, Nike+™*, Jawbone™*
- Calculator
- Copy Machine
- Desktop/Laptop Computer
- Digital Music player (iPod™*)—non-transmitting
- Fax Machine
- Global Positioning System (GPS)
- Barcode Scanner
- Medical Alert Pendant
- Printer
- Radio AM/FM
- Scanner

MEDICAL & DENTAL PROCEDURES

Many medical procedures will not affect your heart device; however, certain medical procedures can result in serious injury, damage to your heart device, or device malfunction. Before undergoing any medical procedure, it is recommended that you advise your treating doctor or dentist that you have an implanted heart device and consult with your heart doctor to evaluate any possible associated risk.

NOT RECOMMENDED

- Diathermy (high frequency, short wave and microwave)
- MRA (Magnetic Resonance Angiography) for Non MR-Conditional Devices
- MRI*
- Virtual Colonoscopy with MRI* for Non MR-Conditional Devices

ACCEPTABLE WITH PRECAUTIONS

Inform your treating physician that you have a heart device implanted and/or consult with your heart doctor/clinic. Medical procedures that require some precautions:

- Ablation (specifically, microwave ablation and radiofrequency ablation)
- Acupuncture with AC-Alternate Current Stimulus
- Argon Plasma Cautery
- Blood Bag Dielectric Sealing Equipment
- Bone Growth Stimulator Alternating Magnetic Field
- Bone Growth Stimulator Introducing AC Current
- Colonoscopy—polyp removal
- Computerized Axial Tomography (CT or CAT) Scan
- ECT (Electroconvulsive Shock Therapy)
- Electrolysis
- Electrosurgery and Other Procedures That Use an Electric Probe to Control Bleeding, Cut Tissue or Remove Tissue
- EMG Electromyography—automated sequence
- EMG Electromyography—single stimulus
- External Defibrillation, AED and Elective Cardioversion
- Hyfrecator
- Hyperbaric Oxygen Therapy (HBOT)
- Interferential Electrical Current Therapy
- Lithotripsy
- Magnetic Therapy
- MET (Microcurrent Electrical Therapy) Alpha-Stim 100™*
- Mechanical Ventilation with a Respiration Rate Monitor
- Muscle Stimulators and Other Devices Sending Current into Your Body
- Neutron Radiation
- Radiation Therapy (external x-ray, Gamma Knife™* or radiosurgery)
- Radiotherapy (Including high-energy radiation therapy)
- Stereotaxis
- Therapeutic Ultrasound
- TMS (Transcranial Magnetic Stimulation)
- Transcutaneous Electrical Nerve Stimulation (TENS) (including Neuro Muscular Electrical Stimulation (NMES))
- Transmitting Loop for Digital Hearing Aid
- Transurethral Needle Ablation (TUNA™* Therapy)
- TUMT (Transurethral Microwave Thermotherapeutic Device)
- TURP Prostate Test (Transurethral Resection of the Prostate)
- Virtual Colonoscopy Performed with CAT Scan (CT Scan)

ACCEPTABLE

If the item is used as intended and in good working condition, there is no known risk:

- Acupuncture—no electrical stimulus
- Acupuncture DC— direct current
- Bone Density Test (x-ray)
- Bone Density Ultrasound—on heel or hand
- Bone Growth Stimulator Direct Current
- Capsule Endoscopy
- Colonoscopy—diagnostic only
- Dental Apex Locator (root locator)
- Dental Drills
- Dental Pulp Tester
- Dental Ultrasonic Scalers/Cleaners
- Dental X-Ray
- Diagnostic Ultrasound (Sonogram)
- Diagnostic X-Rays (fluoroscopy)
- Digital Infrared Thermal Imaging (DITI)
- Echocardiogram
- EECP—Enhanced External Counter Pulsation Therapy
- Electrocardiogram (ECG/EKG)
- Electroencephalography— EEG
- Electronystagmography (Audiology—ENG)
- Hearing Aid (in or behind ear)
- Heart Rate Monitor
- Iontophoresis (drug patch)
- Laser Surgery
- Lasik Eye Surgery
- Lie Detector Test
- Mammography
- Medical Helicopter
- Nuclear Stress Test
- PH Capsules
- Positron Emission Tomography (PET Scan)
- Relief Band™*
- Sleep Apnea Machine

* Unless the device is MR Conditional, then see MRI guidelines for that device. Visit www.mrisurescan.com for more information.

SHAPING A **POSITIVE ATTITUDE** TOWARDS LIVING WITH A PACEMAKER

Remind yourself of the benefits – Remind yourself that your pacemaker helps your heart manage slow heartbeats (bradycardia)

Block negative thinking – Catch yourself if you are imagining the worst case scenarios. Remind yourself that most people feel positive about having their pacemaker

Discuss concerns – Make a list and discuss any worries you might have about your condition or heart device with your doctor and with your loved ones. Develop a plan about how to cope with your concerns

Plan your quality of life – The goal of your ongoing care is to achieve the best quality of life possible. Take an inventory of the activities that are most important to you and discuss plans to return to those activities with your doctor

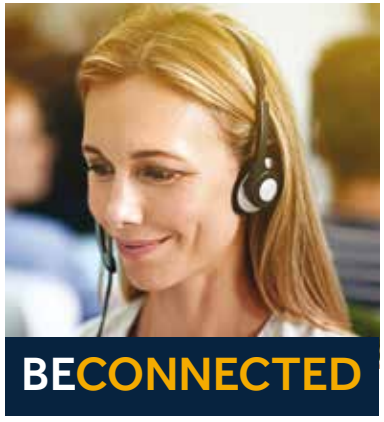
Explore the unknown – Learn about your medical condition and your heart device from your doctor, nurse, library, device manufacturer, and websites. Often learning about your heart device helps reduce anxiety

EDUCATIONAL RESOURCES & SUPPORT

You can rely on Medtronic as your experienced partner when you have a question around your heart device or patient monitoring solution†.

00800-266-632-82*
Official country language(s)
Monday-Friday 8am-4pm**

medtronic.eu
bhf.org.uk



† Subject to local availability
* Free-of-charge number
** Ability to leave voicemail outside of office hours

References:

1 Orenga M. Azure longevity Increase Compared to Advisa. September 2017. Medtronic data on file.

Information contained herein does not replace the recommendations of your healthcare professional. See the device manual for detailed information regarding the instructions for use, indications, contraindications, warnings, precautions, and potential adverse events. For further information, contact your Health Care Professional.

For applicable products, consult instructions for use on www.medtronic.com/manuals. Manuals can be viewed using a current version of any major internet browser. For best results, use Adobe Acrobat® Reader with the browser.

Important Reminder: This information is intended only for users in markets where Medtronic products and therapies are approved or available for use as indicated within the respective product manuals. Content on specific Medtronic products and therapies is not intended for users in markets that do not have authorization for use.

LIFE WITH A PACEMAKER

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