

After Your Pacemaker Generator Change

What you need to know

This handout explains how to care for yourself after a pacemaker generator change. It includes wound care tips, activity restrictions, and safety precautions around magnets, devices, and travel. You'll also learn what to avoid, when to call your care team, and how to protect your pacemaker long-term.



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this handout.

Who to Call

- If you have questions about your appointments, call your Cardiology Clinic weekdays between 8 a.m. and 4:30 p.m. (except holidays):
 - **UWMC - Montlake patients:** 206.598.4300
 - **UWMC - Northwest patients:** 206.363.1004
 - **HMC - Harborview patients:** 206.744.3475
- Call us if you have a question about your procedure, care after your procedure, or your follow-up:
 - Weekdays between 8 a.m. and 4:30 p.m., call your EP nurse
- On weekends, holidays, or after hours, call 206.598.6190 and ask to page the *Electrophysiology (EP) Fellow* on call. The EP Fellow is a doctor who works with your primary electrophysiologist. These doctors specialize in caring for patients with pacemakers.
- **For all urgent concerns, call 911.**

For Your Safety

Anesthesia and sedation can make you sleepy and make it hard for you to think clearly. **If you had ANY anesthesia or sedation for this procedure:**

- **A responsible adult must take you home.** You may not take a bus, shuttle, taxi, or other transportation by yourself.
- For the next **24 hours:**
 - Do **NOT** drive. Make sure you have a responsible adult who can help you during this time.
 - Do **NOT** be responsible for children, pets, or an adult who needs care.
 - Do **NOT** drink alcohol or take drugs other than the ones your doctors prescribed or suggested.
 - Do **NOT** make important decisions or sign legal papers.



A responsible adult must take you home after your procedure.

Wound Care

- Call one of the numbers listed under “Who to Call” on page 1 **right away** if you have:
 - Redness, swelling, or drainage at your puncture site
 - Drainage
 - Fever higher than 100.4°F (38°C)
 - Chills
 - Any concerns or questions about your wound
- Remove your dressing (bandage) within **72 hours (3 days)** after your surgery.
- Your wound was closed with skin glue. You may shower **72 hours (3 days)** after your surgery, but do not soak your incision until it is **fully** healed.
- When you shower, gently clean the site with mild soap and water. Do not scrub or rub the area. Gently pat dry with a clean towel.
- Do **not** put creams, lotion, powder, or ointments on your incision until it is **fully** healed.
- Avoid touching the area over or around your pacemaker. Do **not** poke or twist your pacemaker.
- In the car, add some padding to your seat belt strap if it crosses over your pacemaker implant site. Keep this padding in place until your wound is fully healed.
- **Do not let anyone poke or probe your incision** with fingers or instruments before checking with us first. If a healthcare provider feels this needs to be done to provide your care, have them **call the EP doctor before** doing this type of exam or procedure.
- We will check your wound 7 to 14 days after your surgery. It is **very** important that you go to this appointment and all your follow-up visits.

See the appointment page your nurse gave you for dates and times of your follow-up visits.

Activity Restrictions

Travel

If you have travel plans in the first 2 weeks after your surgery, check with your doctor for instructions.

Special Long-Term Precautions

Travel

- **Always** carry your pacemaker identification (ID) card.
- If you must go through a metal detector, hand your pacemaker ID card to security staff. Tell them that you might set off the alarm.
- You may also want to carry a card with this information in the language(s) of the country (or countries) you will visit or travel through.

- Although some studies show there are no risks to pacemakers from metal detectors, most makers still suggest being careful:
 - You may walk through the metal-detection arch, but do **not** stay inside the arch or lean on the sides of the structure.
 - If security staff use a metal-detection hand wand, ask them to avoid waving or holding it over your pacemaker.
 - If you feel dizzy or have fast heartbeats (*palpitations*) when you are near a metal detector, move farther away. Your pacemaker should begin to work properly right away.
 - Body scanners that are used in some airports and other places will not affect your pacemaker.
- Always carry a full list of your current medicines. Include their doses, how often you take them each day, and why you are taking them.
- Always carry your medicines with you in your carry-on bags. Do **not** pack them in your checked luggage.
- Carry phone numbers for your healthcare providers in case of emergency.

Magnetic Fields

Magnets or magnetic fields are found in or are created by many items we are around every day. Some of these are:

- Small appliances with motors
- Stereo speakers
- Gas engines
- Cell phones
- Desktop and laptop computers
- Welding machines
- CB radios
- *Magnetic resonance imaging (MRI) machines*
- Anti-theft devices in stores
- Metal detectors

It is safe to be near microwaves, blenders, and most other items on the list. But some create strong magnetic fields that interfere with your pacemaker.

Basic advice and precautions for sources of magnetic fields are on the next 2 pages. **For more details, contact the maker of your pacemaker.**

NOTE: These suggestions assume that the equipment is properly grounded, in working order, and used for its intended purpose.

Cell Phones

Most cell phones are safe if you:

- Carry it **at least** 6 inches (15 centimeters) away from your implant site. Most cell phones keep sending a signal even when not in use.
- Hold it to your ear on the **opposite side** of your pacemaker.

Radio Transmitters

Radio transmitters such as CB radios, walkie-talkies, and remote-controlled toys may interfere with your pacemaker. Based on how many watts a device generates, here are guidelines for how far to keep away from it.

Watts Generated*	How Far to Keep From It
3 watts	12 inches (30 centimeters)
25 to 199 watts	3 feet (1 meter)
200 watts or more	10 feet (3 meters)

***If you do not know the power output of your device, call the maker of the device.**

Car Engines and Small Motors

- Most small appliances or hand tools with motors are safe to use when the item is grounded, in good condition, and is held the right distance from your body for safe and proper operation.
- Use caution when working on car engines. Keep your upper body at least 24 inches (60 centimeters) away from a running car engine.

Electric Toothbrushes

- Keep the toothbrush handle **at least** 1 inch (2.5 centimeters) away from your pacemaker.
- Keep **at least** 6 inches (15 centimeters) between the charger and your pacemaker.

Medical Procedures or Equipment

Always tell your providers and healthcare personnel that you have a pacemaker. Never assume everyone involved in your healthcare knows this.

These procedures or devices may interfere with your pacemaker:

- *Electrocautery* (a surgical procedure that uses an electric current to remove unwanted tissue, seal off blood vessels, or create an incision)
- Placement of a *central venous catheter* (a catheter that is placed in a large vein to deliver medicine)
- *Lithotripsy* (a procedure that uses shock waves to break up stones in the kidney, bladder, or ureter)

- *Ultrasound* (an imaging technique that uses sound waves)
- *Electrolysis* (hair removal)
- External *cardioversion* or *defibrillation* (a procedure to bring an abnormal heart rhythm back to normal)
- *Magnetic resonance imaging* (MRI) machines
 - Note: You **must** contact your EP team before MRI (Magnetic Resonance Imaging) exams. Let MRI team know you have a Pacemaker.
- Hearing aid with a coil around the neck that detects sounds and sends digital signals to the amplifier
Note: Before using this type of hearing aid, call your pacemaker maker.
- Radiation therapy (usually used in cancer treatment)
- TENS (transcutaneous electrical nerve stimulation) for pain control
- Body-fat measuring scales

Other Precautions

Many makers of pacemakers advise that you also **avoid being around or using these items:**

- Arc welders
- Gas-powered chainsaws
- Induction furnaces such as kilns
- Magnetic (therapy) mattress pads or pillows
- Electric steel furnaces
- Dielectric heaters (heaters that use radio waves or microwaves)
- Electrical transmissions towers (if you are **inside** a restricted area)
- Jackhammers
- Stun guns

Dental Work

- Tell your dentist that you have a pacemaker. Most times, you do not need to be concerned that any of the devices the dentist uses will interfere with your pacemaker.
- If you did not need antibiotics for dental procedures before your surgery, you will not need antibiotics now that you have a pacemaker. If you have questions, please ask your doctor.

Your Pacemaker

This handout covers **only** basic precautions you may need to take with your pacemaker. Each device may have other special precautions to follow.

If you have any questions about what might cause problems for your new pacemaker, contact the maker for more specific information. Here is contact information for 4 companies that make pacemakers:

- **Abbott**
www.sjm.com
818.362.6822 or 800.681.9293
- **Biotronik**
www.biotronikusa.com
800.547.0394
- **Guidant/Boston Scientific**
www.guidant.com
866.GUIDANT (866.484.3268)
www.bostonscientific.com
888.272.1001
- **Medtronic**
www.medtronic.com
800.551.5544 or 800.328.2518

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- **For general questions**
weekdays 8 a.m. to 5 p.m.:
 - Montlake patients: call 206.598.4300
 - Northwest patients: call 206.363.1004
 - Harborview patients: call 206.744.3475
- **For questions related to your procedure**
weekdays 6:30 a.m. to 8 p.m.:
 - Montlake patients: call 206.598.7146
 - Northwest patients: call 206.668.1084
 - Ask to talk with a nurse.
- **For urgent concerns related to your procedure**, or if it is after hours or on a weekend or holiday: call 206.598.6190 and ask to page the Cardiology EP Fellow on call.