

# Cardiac Implantable Device Replacement Procedure

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## What is an implantable device replacement procedure?

Cardiac implantable electronic device (CIED) replacement is surgery to replace a pacemaker or implantable cardioverter defibrillator (ICD).

## Why do I need an implantable device replacement procedure?

The most common reason for CIED replacement is because the generator is nearing the end of its lifespan. The batteries typically last 5 to 10 years, so you may have multiple replacements in your lifetime. A member of your healthcare team checks your generator at appointments and reviews home monitoring reports. This allows them to know when your generator needs to be replaced.

Other reasons for device replacement may include:

- Your provider recommends a newer version of the device or one that has additional capabilities.
- Your implantable device malfunctions or stops working.
- You develop an infection that requires device removal.

## What are the risks of having the procedure?

This procedure is very safe, but comes with some minimal risks, which include infection and bleeding.

## What happens during a CIED replacement procedure?

Replacing your device generator is a simple outpatient procedure similar to your initial implant. However, this time, only the generator will be replaced. If the original leads are working normally, they will continue to be used with the new generator.

## **How do I confirm my arrival and procedure time?**

A nurse will call you between **12 p.m. and 5 p.m.** one business day before your procedure to confirm the time you should arrive at the hospital, where to check in, and final instructions. The typical arrival time is between the hours of **6 a.m. and noon.**

## **How can I prepare for my procedure?**

There are several steps you should take before your procedure:

- Assign a driver who is 18 years or older to be present with you at check-in and discharge. You will not be able to drive yourself home.
- Buy antiseptic soap with chlorhexidine gluconate (CHG). CHG soap is a surgical soap that reduces the number of germs on your skin.
  - CHG soap can be found in the First Aid section at major drug and grocery stores nationwide, including Target, Walmart, Walgreens, CVS, or Rite-Aid.

## **After midnight the night before your procedure:**

- **Do not** drink any fluids or eat food, gum, or candy after midnight the night before your procedure.
- If you must take morning medication, you may have sips of water with your medication up to 2 hours before your arrival time.

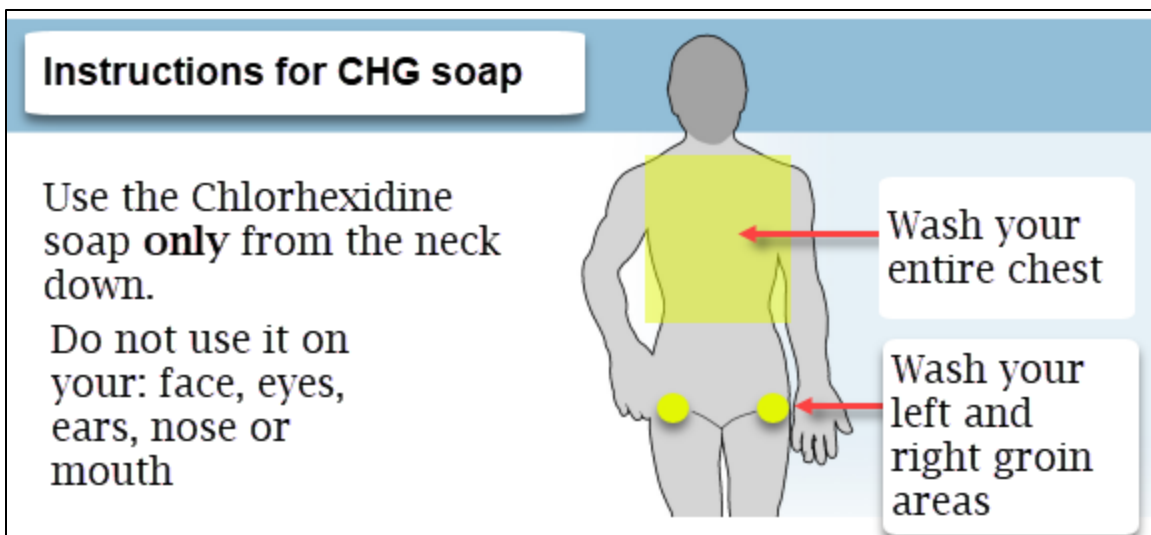
## **How do I shower and get ready for my procedure?**

You need to shower both the night before **and** the morning of your procedure using an antiseptic soap with CHG in it.

Here are the steps for showering:

1. Wash your face using regular soap.
2. Wash your hair using regular shampoo. Make sure to rinse your hair completely after shampooing.

3. Next you will wash your body from the neck down using the CHG soap for at least 5 minutes with a freshly laundered wash cloth.
4. Follow these instructions for the CHG body wash:
  - a. First, wash your procedure site areas and all surrounding skin with the CHG soap. The procedure site areas include your chest and groin (the area where the thigh meets the belly). Leave soap on skin for 1-2 minutes to allow the soap to kill the bacteria.



- b. Then use the CHG soap to wash your underarms, chest, under your breasts, stomach/belly button, hips, and buttocks.
      - **Do not** use CHG soap on your face, eyes, ears, mouth, or hair.
      - **Do not** use CHG soap on your penis and scrotum or vulva.
    - c. Rinse your body thoroughly with warm water.
5. Rinse your body completely and pat your skin dry with a freshly laundered towel.
  - a. **Do not** apply make-up, deodorant, lotions, sprays, gels, creams, ointments, or powders after showering with the CHG soap.
  - b. After showering, use freshly laundered clothes and bed linens.
6. Put on freshly laundered underwear, socks, and clothing.

7. On **the morning of your procedure** use a new freshly laundered washcloth and towel and repeat steps 1-6.

### **Who should I call if I have questions or concerns?**

Please contact us if you need to cancel or change your procedure date.

- Call the Cardiac Procedures Unit: **(844) 369-7816**, Monday-Friday, 8 a.m. to 5 p.m.
- After 5 p.m. or on weekends or holidays call **(734) 936-6267**. Ask the hospital operator to page the Electrophysiologist (EP) Fellow on call.

### **How do I care for myself after my CIED replacement procedure?**

Read below to learn how to best care for yourself after your procedure.

#### **When do I need to seek emergency care?**

Call 9-1-1 **immediately** if you develop:

- Sudden onset of chest pain
- Shortness of breath
- Sudden confusion or trouble speaking or understanding speech
- Sudden trouble seeing in one or both eyes
- Sudden numbness or weakness of face, arm, or leg, especially on one side of your body
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden or severe headache with no known cause
- Nausea with uncontrolled vomiting
- Severe bleeding

#### **When do I need to seek medical attention?**

Call us if you develop any of the following symptoms:

- Fever of 100.5 degrees Fahrenheit or higher
- Bleeding that does not stop or increases

- Bruising that increases or becomes more painful
- Redness, swelling, heat, or foul-smelling drainage near the procedure site
- Discomfort that increases or extends to the arm on the same side of the device
- Swelling that increases or becomes painful, or if the hand or arm on the same side as the device is swelling
- Dizziness
- Irregular heartbeats (heart palpitations)
- Any unusual occurrence that causes you concern

### **What is the number to call?**

Call us at **(888) 287-1082** Monday through Friday, 8 a.m. to 5 p.m. and ask for the Device Clinic Nurse.

- **After 5 p.m. or on weekends or holidays**, call (734) 936-6267 and ask to speak with the Electrophysiology (EP) fellow on call.
- If you cannot reach medical assistance by phone, **call 9-1-1.**

## What can I expect at my procedure site?

You can expect the following:	Call your doctor if:
<p><b>Bleeding</b> - There may be a few drops of blood from the site. There may also be bruising.</p>	<ul style="list-style-type: none"> <li>• Bleeding does not stop or if it increases.</li> <li>• Bruising increases or becomes more painful.</li> </ul>
<p><b>Tenderness, discomfort, or pain</b> - There may be some discomfort in the area of the incision. This should improve over several days.</p>	<ul style="list-style-type: none"> <li>• The discomfort increases.</li> <li>• The discomfort extends to the arm on the same side of the device.</li> </ul>
<p><b>Swelling</b> - There may be slight swelling over the insertion site. This should gradually improve over several days.</p>	<ul style="list-style-type: none"> <li>• The swelling increases or becomes painful.</li> <li>• The hand or arm on the same side as the device is swelling.</li> </ul>
<p><b>Signs of infection</b> - There should <b>not</b> be any signs of infection after your operation.</p>	<p>You have signs of infection around the incision, such as</p> <ul style="list-style-type: none"> <li>• Redness</li> <li>• Swelling</li> <li>• Skin feels hot to the touch</li> <li>• Drainage</li> </ul>
<p><b>Rash</b> - There should <b>not</b> be a rash on your body.</p>	<p>You notice a rash.</p>

## How will I take care of my procedure site?

- **Do not** swim or put your incision under water until you have seen your doctor for a wound check 7-10 days after your procedure. This includes pools, hot tubs, and bathtubs.
- Keep area with dressing clean and dry for 48 hours after your procedure. After 48 hours you may remove the dressing and shower.
- Avoid spraying water directly on your incision while showering.
- Wash your incision with your usual bath soap and water every day. **Do not** scrub your incision.
- Pat the incision site dry and leave open to air.
- Use a freshly laundered wash cloth and towel each time you shower.
- **Do not** put any creams, lotions, powders, or ointments on your incision.

## What are my activity instructions?

- Do not lift any objects weighing more than 15 pounds with your affected arm until after the wound check 7-10 days after your procedure.
  - **Exception:** There are no weight restrictions for a generator (battery) change, but you should listen to your body and stop if you experience pain or discomfort.
- You can move your affected arm normally but should listen to your body and stop if you experience pain or discomfort. The “**affected**” arm is the arm on the same side as your device. If your device is on the right side, then your “affected” arm is your right arm.
- If you received a sedative or an opioid pain medication during your procedure, **avoid the following activities** for 24 hours after your procedure or until you stop taking pain medication:
  - Driving
  - Making important or complex decisions
  - Using power tools

- Drinking alcohol
- Cooking
- All other strenuous activities
- Your doctor may recommend no driving for a period of 6 months depending on your condition. Talk to your doctor about driving at your follow-up visit.
- If you require work restrictions, this will be further discussed at your follow-up visit.

### **What are my diet instructions?**

You may resume your previous diet when you get home.

### **What is my follow-up care?**

We will need to check your device and incision after your procedure. You will receive a **notification in the mail or in the patient portal** with the date and time of your virtual visit. If you do not receive appointment information within 5 days, call **(888) 287-1082** to make an appointment with the Device Clinic.

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Author: Bethany Lee-Lehner, RN, MSN  
Reviewers: CIED Workgroup, Laura Horwood, NP  
Control #1488

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