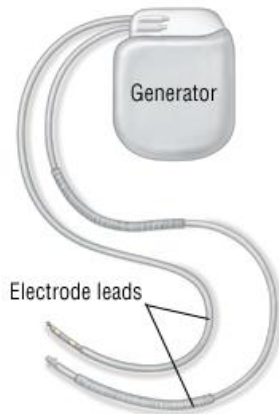


## BATTERY / GENERATOR CHANGE

## ICD LEAD REVISION

### What is it?

Patients who have implanted devices in their body (such as pacemakers and implantable cardioverter-defibrillators, ICD) require occasional modifications or replacements. This may come in the form of a battery or generator change, or a change of the wires (or “leads”).



Due to the advances of technology, pacemakers and ICDs require a maximum of one change per year. Most patients do not require yearly battery changes. For most devices, they’re expected to last 6 years or longer. Just as your watch will require a new battery, these devices also require either a change of the battery or the generator which keeps the heart’s pace. The doctor will typically put the patient under anesthesia, take the old battery or generator out of the device, and replace it with a new battery or generator.

Alternatively, on occasion, the wires or “leads” require changing – similar to how the filter of your water pitcher requires a change. This may be because of the age of the wiring, a bad wire that may cause harm to the patient, or any other possibility that may potentially cause harm to the patient. The doctor will typically put the patient under anesthesia, take out the current lead and replace it with a new lead.

[Click here for more information about pacemakers and cardioverter-defibrillators.](#)

### Who needs it?

Battery or generator changes, and ICD lead revisions are recommended if you have:

- A device that’s nearing the end of its battery life
- A device that is inappropriately or unnecessarily firing
- A recall on the device that is implanted

### What to expect before, during, and after?

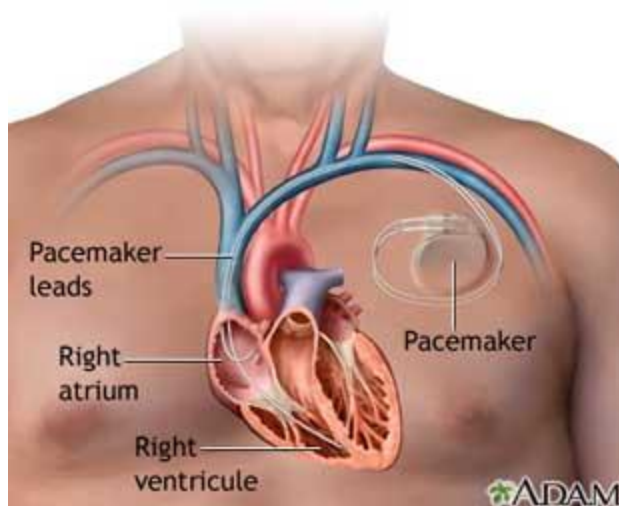
#### ***BEFORE***

Prior to the scheduled procedure, you will be asked to come by the office to speak to us regarding how to best prepare. The doctor will explain the procedure to you in detail and review your most recent test results and lab work to see if any other precautionary steps are needed. You may need to make certain changes to your diet or

medication regime. Direct instructions will be provided by our office. Since these procedures are performed in a hospital, it is best to make arrangements for a ride both to and from the hospital.

### ***DURING***

Being that you already have an implanted device inserted in your body, the doctor will gain access to the device while you're under anesthesia. After the device has been accessed, the doctor will remove the old battery/generator/lead from your device and insert the new battery/generator/lead. After everything is set, there will be certain tests to see the functionality of the device under controlled circumstances. If everything is working as it should, the doctor will stitch the skin back together, and finish with the procedure.



### ***AFTER***

Pain medication may be given to you if you are experiencing any pain. An overnight stay is necessary; if the next morning, all parts of the device are functioning appropriately, no pain is expressed, and there aren't any complications at the insertion site, you will be discharged and may go home. Specific instructions will be given to you about the care of the device and any type of activity that you may or may not perform.

Are there any risks I should be aware of?

As with all procedures, there is a risk, but these rarely carry any serious adverse events.

Some complications include:

- Blood clot formations
- Infection, bleeding, bruising at the insertion site
- Mechanical malfunctions after hospital discharge