



ALL LOCATIONS TOLL FREE 1-800-243-1912

ICD Patient Information

What is an ICD?

Implantable cardioverter defibrillators (ICDs) are small devices, about the size of a pager, that are placed below the collarbone. Via wires, or leads, these devices continuously monitor the heart's rhythm. If the heart beats too quickly, the ventricles will not have enough time to fill with blood and will not effectively pump blood to the rest of the body. Left unchecked, the rapid heartbeat could cause death. To intervene, the ICD issues a life-saving jolt of electricity to restore the heart's normal rhythm and prevent sudden cardiac death.

ICDs also can act as pacemakers when a heart beat that is too slow (bradycardia) is detected.

Most ICDs keep a record of the heart's activity when an abnormal heart rhythm occurs. With this information, the electrophysiologist, a specialist in arrhythmias, can study the heart's activity and ask about other symptoms that may have occurred. Sometimes the ICD can be programmed to "pace" the heart to restore its natural rhythm and avoid the need for a shock from the ICD. Pacing signals from the ICD are not felt by the patient, shock signals are, and have been described as a kick in the chest.

When is ICD therapy the right choice?

In the simplest terms, anyone who has had or is at a high risk of having ventricular tachycardia, fibrillation or sudden cardiac arrest is a candidate for an ICD. Other conditions, such as a prior heart attack and an ejection fraction of <35% or less, could also add to your risk of sudden cardiac death. Refer any questions about when this device is used to your doctor.

Implanting your ICD system

An ICD implant typically requires about 1-2 hours of surgery. During the procedure, your doctor will insert the lead into a vein, usually through a small incision near your collarbone. The doctor then passes the lead through the vein into your heart, where the tip of the lead rests directly against your heart's inner wall. If your doctor decides your heart condition requires dual-chamber pacing, an additional lead will be implanted. One lead will be in the atrial chamber and another in the ventricular chamber.

After the leads are positioned, they are tested to make sure they clearly record your heart signals. Your doctor will start an arrhythmia in your heart. The device will sense the rhythm and give the programmed treatment. Depending on the type of arrhythmia, the device will deliver antitachycardia pacing, cardioversion, or defibrillation therapy.

Implant Risks

Some risks encountered during the implant procedure include infection, bleeding, and puncture to the heart or lungs.

Some of the risks encountered after the device is implanted may include, but are not limited to infection, bleeding and the lead(s) may move out of place in the heart. The device might not have the ability to detect or appropriately treat your heart rhythms. Also, you may receive inappropriate shocks.

It is important that you talk with your doctor about the risks and benefits associated with the implantation of this system.

After your Implant

As you recover from your implant surgery, you will find that your ICD system may allow you to return to an active lifestyle. Follow your doctor's instructions including:

- report any fever, redness, swelling, or drainage from your incision.
- avoid lifting heavy objects or raising your arm above shoulder level until instructed by your doctor.
- walk, exercise, and bathe according to your doctor's instructions.
- avoid rubbing your device or the surrounding chest area.
- tell your other doctors, dentist and emergency personnel that you have an ICD.

What to avoid after your implant

Some of the equipment used in medical procedures might affect your device such as:

- Magnetic resonance imaging (MRI)
- electrocautery
- therapeutic radiation treatment for cancer
- TENS (nerve stimulation unit)

Most medical and dental procedures will not affect your device. These include dental drills and cleaning equipment, X-rays, ultrasound procedures, EKG machines and CT scans. If you need to undergo any surgical procedures, tell your dentist and/or doctor that you have an ICD system. They will contact your cardiologist to find the best way to provide treatment.

After your implant you will receive a handbook for patients with further information about your device. Follow-up will be needed in the office to check your device every 3-6 months or as directed by your physician.