

YOUR VALUES
YOUR PREFERENCES
YOUR CHOICE

Allina Health 

Understanding Implantable Cardioverter Defibrillator (ICD)

Have the ICD Placed, Not Have the ICD Placed



Understanding Implantable Cardioverter Defibrillators

Implantable Cardioverter Defibrillator (ICD)

An ICD is a device that may help correct fast heartbeats coming from the lower chambers of the heart. These rapid rhythms can be life-threatening.

An ICD monitors the heart and delivers a shock or special pacing therapy to restore the heart to a normal rhythm. A shock from the ICD is intended to reset the heart rhythm and bring the heart back to a normal rhythm.

Some ICDs also may treat fast rhythms with a special type of pacing therapy. Rapid pacemaker impulses may be sent to the lower chamber to “catch up” with, and then slow down the fast beating.

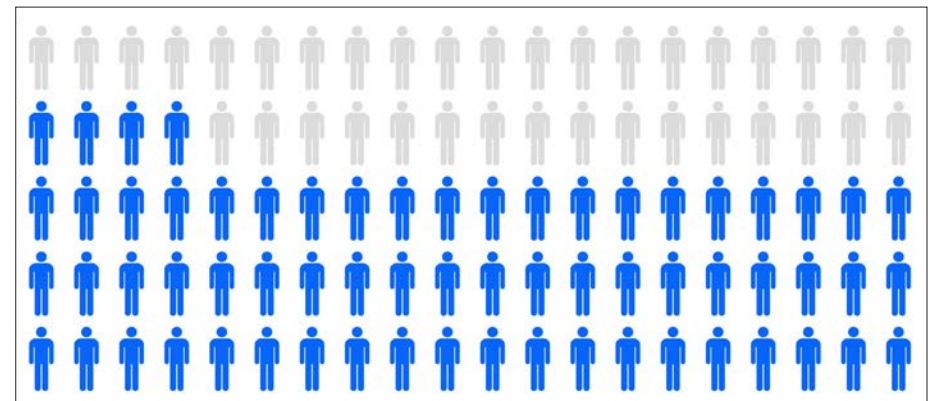
ICDs have a built-in pacemakers. Sometimes, the pacemaker is programmed to work in the event of a slow heartbeat that happens following a shock. Sometimes, the pacemaker is programmed to work all the time to correct slow heartbeats or to coordinate the contraction of the lower chambers.

People Who Have the ICD



About 71 out of 100 people with an ICD over a 5-year time period will survive a dangerous heart rhythm.

People Who Do Not Have the ICD



About 64 out of 100 people without an ICD over a 5-year time period will survive a dangerous heart rhythm.

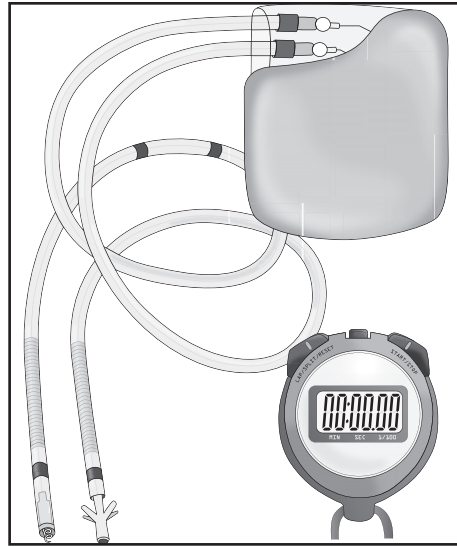
Your Treatment

Parts of an ICD

An ICD has two parts:

- **a pulse generator:** this holds the battery and contains a computer that can sense when changes in your heart rate or rhythm are potentially dangerous.
- **lead wires (1 to 3):** these monitor the electrical impulses produced by your heart and send information back to the generator.

If your heart rate is too fast, or if the leads detect a life-threatening arrhythmia, a shock can be sent through the wire in the lower right chamber of your heart to attempt to reset the rhythm, slow the heart rate, or both.



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An ICD is similar in size to a stopwatch.

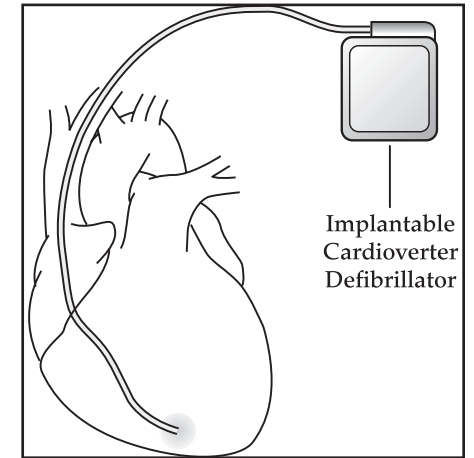
How an ICD is Implanted

Placing an ICD does not require open heart surgery. It is a procedure done in a special procedure or operating room in the cardiac lab.

It can be placed on either the left or right side of the chest, but is most often placed on the left, just below the collarbone.

Talk with your doctor if you have special reasons to have the ICD placed on one side or the other, such as being left handed, or if you hunt using a rifle.

The procedure usually takes up to 2 hours. You may spend 1 night in the hospital before you return home.



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The procedure to implant the ICD takes up to 2 hours.

Your Treatment (continued)

Before the procedure

- Talk with your doctor about your medicine needs. Be sure to ask your doctor about your medicines if you have:
 - bleeding problems or if you take blood-thinning medicines
 - diabetes. You may need to stop taking or adjust your regular dose of medicine for this test. Be sure to find out what dose(s) to take and when you can return to your usual medicine schedule.
- You will receive directions about when you should stop eating and drinking.
- An intravenous (IV) line will be started to give fluids and medicines during your procedure. One or more blood tests, and an electrocardiogram (ECG) may be done before the procedure.
- Your hair will be clipped and your skin may be scrubbed at procedure sites, including the groin, neck, upper chest and back.
- After your questions have been answered, you will be asked to sign a consent form.
- You will be taken to the procedure room on a cart.
- Your family members will be directed to the waiting area.

During the procedure

- You will be positioned on the procedure table.
- Your nurse will connect you to several monitors and gently secure you to the table with soft restraints to keep you safe.
- Your nurse will prep your skin over the ICD site and place a sterile drape over the site. You may also have a drape placed in front of your face.
- You will be given a medicine to make you feel drowsy and comfortable.
- The doctor will numb the skin where the incision will be made.
- After making an incision about two inches long under your collarbone, the doctor will make a small “pocket” for the ICD under the skin.
- Through this same incision, the doctor will find a vein that leads to your heart. Your doctor will use a special X-ray monitor to guide the ICD leads into your heart through the vein.
- Your doctor will attach the leads to your heart using small anchors on the tips of the leads. He or she attaches the generator to the leads and puts the ICD in the pocket under your skin.
- You may receive medicine to put you to sleep for a few minutes. While you are asleep, the doctor may test the ICD to make sure a shock would work in the event of a dangerous rhythm. You will not feel this shock.
- Your doctor will close the incision with stitches, special surgical glue, staples, or a combination of these.
- You may be taken to the recovery area.

Your Treatment (continued)

After the procedure

- Your nurse will check your vital signs as you recover.
- You will be attached to a heart monitor that will check your heart rate and rhythm, and make sure that your ICD is working correctly. Your nurses will let you know when it is OK for you to be out of bed with the monitor.
- The nurses will help you and give you activity instructions.
- You will likely have a dressing over your incision at first. The nurses will check the dressing and incision for bleeding, drainage or swelling.
- You may feel some discomfort at the incision site for several days. This is normal. Talk with your nurse about how to manage your pain.
- You will have a chest X-ray after your ICD is implanted.
- Your doctor will look at this X-ray to make sure that your lungs are fully expanded and that the leads (wires) are in a good location.
- A representative from the ICD clinic will visit you. He or she will use a special computer or programmer at your bedside to communicate with your ICD and make sure that everything is working. Your ICD settings can be adjusted using this computer.
 - Checking your ICD is called an “interrogation.” Regular checks will be scheduled at the ICD clinic to have your device checked.
 - An electronic “wand” is placed over the ICD. The wand downloads and interprets your ICD settings. Based on your needs, changes to your ICD settings can be made with the wand.

- Before you go home, you will receive instructions about:

- activity
- lifting restrictions
- pain medicine
- incision care.

- Ask your doctor or the ICD clinic staff about when you can return to your normal activities, when you can drive or when you can return to work.
- It is normal for the incision and ICD pocket to be tender to the touch.

Follow-up appointments

- See your regular health care provider in 7 to 10 days to check your incision.
- You will return to your ICD clinic in about 2 months for a follow-up visit. The health care team will tell you if you need to see your cardiologist at that time as well.
- You may be able to have your ICD checked over the phone.

It is important to keep all follow-up appointments.

Comparing My Options

	Have the ICD Placed	Do Not Have the ICD Placed
Devices <ul style="list-style-type: none"> — Will I be able to use household appliances? — Will I be able to use my cell phone? — Will I be able hunt using a rifle? 	<ul style="list-style-type: none"> ■ You should still be able to use household appliances such as a microwave or hair dryer. ■ You may use your cell phone. Do not keep your phone in a shirt or coat pocket. This is too close to your chest. ■ Talk with your health care provider if you hunt using a rifle. You may need to have the ICD placed on the other side of your body from where you hold the rifle. 	<ul style="list-style-type: none"> ■ You will need to talk with your health care provider about what is and is not safe for you to lift. ■ You are able to use your cell phone. ■ You are able to use a hunting rifle.
What is most important to you?		
Magnetic Fields <ul style="list-style-type: none"> — Will I be able to have an MRI or CT scan? — Will I be able to walk through metal detectors? — Will I be able to walk through airport security? 	<ul style="list-style-type: none"> ■ You are able to have a CT scan. You will need to talk with your health care provider about if a MRI is safe for you. ■ You are able to walk through metal detectors. ■ You are able to walk through certain types of airport security. ■ You will have an ICD identification card that will help security personnel determine what is safe for your device. 	<ul style="list-style-type: none"> ■ You are able to have scans such as an MRI or CT. ■ You are able to walk through metal detectors. ■ You will be able to walk through airport security.
What is most important to you?		
Driving <ul style="list-style-type: none"> — Will I be able to drive? 	<ul style="list-style-type: none"> ■ Your health care provider may ask you not to drive for up to 6 months after the ICD is placed. ■ You are not able to drive a commercial motor vehicle, even if you are licensed. 	<ul style="list-style-type: none"> ■ Your health care provider may give you driving restrictions.
What is most important to you?		

Comparing My Options (continued)

	Have the ICD Placed	Do Not Have the ICD Placed
Physical Activity <ul style="list-style-type: none"> — Will I be able to exercise? — Am I able to have sex? 	<ul style="list-style-type: none"> ■ You will be able to exercise. Talk with your health care provider about which exercises are safe for you. ■ You are able to have sex. 	<ul style="list-style-type: none"> ■ Your health care provider may have some restrictions for you when exercising with heart problems. ■ You are able to have sex.
What is most important to you?		
Quality of Life <ul style="list-style-type: none"> — Will it help with my heart disease? — What are the benefits of this option? 	<ul style="list-style-type: none"> ■ You may have fewer problems and symptoms of heart disease. ICDs do not cure heart disease. ■ The ICD monitors your heart rhythm 24 hours a day and gives treatment for when your rhythm becomes rapid. This helps your heart to return to a normal and safe rhythm. 	<ul style="list-style-type: none"> ■ You will still have symptoms of heart disease. Talk with your health care provider about treatment options for heart failure. ■ You will not need surgery or have any side effects from having the ICD placed.
What is most important to you?		
Risks <ul style="list-style-type: none"> — What are the general risks? — Are there any side effects? 	<ul style="list-style-type: none"> ■ You will need surgery to have it placed. ■ Two out of 10 people get shocked by their ICDs. Most shocks happen because of irregular heart rhythms. ■ Side effects from having an ICD may include bleeding, lung or heart problems, infection, and anxiety or depression. 	<ul style="list-style-type: none"> ■ Your chances of dying from sudden cardiac arrest are higher. This is when your heart stops working because of an abnormal heart rhythm. ■ Your heart rhythms will not be regulated. ■ You may have anxiety from not having your heart monitored 24 hours a day.
What is most important to you?		

My Preferences

Questions	My Thoughts
As you think about possible risks, what are your fears or concerns?	
As you think about both options, what are your hopes or goals?	
Are you clear about the benefits and risks of each option? What matters most to you?	
Which of these options, at this time, do you feel fits best with your treatment goals?	
Is there anything that may get in the way of you doing this?	
Do you feel you have enough support and information?	

My Preference at This Time

have the ICD placed do not have the ICD placed undecided

Next Steps

Questions for Your Cardiology Care Team

- 1. Is the ICD safe for me?

- 2. How likely am I to benefit from the ICD?

- 3. When should I consider having the ICD placed?

- 4. How rare or common are the risks for the ICD?

- 5. Can the ICD be taken out?

- 6. Can the ICD be turned off?

- 7. What does a shock feel like?

- 8. What can I do to prevent my heart problems from getting worse?

- 9. When do I need to decide if I will have the ICD placed?

- 10. What is the next step for me?

- 11. Other questions:

Next Steps

Questions for Your Insurance Provider

It is important for you to understand your health care benefits as you make your treatment decision.

Please call your insurance provider and find out exactly what is and is not covered under your plan, and how much you have to pay yourself. Look for the telephone number on your membership card.

- 1. Will this treatment be covered?
- 2. Are there specific requirements or criteria that my health care team, hospital or I must meet to receive coverage?
- 3. How much will I need to pay for this treatment?
- 4. Does my hospital stay need to be pre-approved? yes no
If yes, who should pre-approve my hospital stay?
What do I need to do to receive the pre-approval?
- 5. Will more hospital days be covered if there are problems (complications)? yes no
If yes, how many extra days are covered and at what rate of coverage (percentage)?
- 6. Other questions: _____

Notes

Allina Health Account

Sign up for an Allina Health account online to get:

- better communication with your clinic, hospital and provider
- faster answers
- online access to you and your loved one's health information anytime.

With your account, you can:

- read visit notes and follow-up instructions
- view and pay bills
- refill a prescription
- view immunizations and medicines

- set and track health goals
- receive lab results sooner
- do an online visit for common conditions
- manage another person's care
- write a health care directive
- email your care team*
- schedule appointments*.

Sign up for a secure account online at allinahealth.org.
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**Availability varies by location. Ask your clinic or hospital if this service is available.*

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