

FACT SHEET: Implantable Cardioverter Defibrillators (ICDs)

What Defibrillators Do

- ICDs administer electrical shocks or pacing therapy to stop ventricular fibrillation (VF) - a lethal condition in which the heart quivers chaotically and pumps little or no blood. ICDs also stop ventricular tachycardia (VT), and other less problematic arrhythmias.
- ICDs also collect information for the physician to use in programming the device to the exact needs of the patient.

Effectiveness

- ICDs are proven to be 98 percent effective in treating dangerous ventricular arrhythmias that can lead to sudden cardiac arrest.

Implantation and Testing

- Implantation of an ICD takes only about one hour, and sometimes can be done on an outpatient basis.
- A physician injects local anesthesia and makes an incision about 4 inches long in the upper chest. The ICD is inserted and the leads are maneuvered through a vein into the heart.
- The physician programs the ICD and tests it before closing the incision.

Modern ICDs are Highly Sophisticated

- They are designed to ensure that impulses are delivered only when needed. Today's devices often deliver "low-level pain" rhythm-regulating therapy without the patient being aware of it.

Who Might Benefit from an ICD?

- People who have intermittent ventricular tachycardia (VT), in which the heartbeat suddenly and without warning speeds up to dangerous levels.
- People who have survived an episode of sudden cardiac arrest.
- People who have a family history of sudden cardiac arrest.
- People who have survived a myocardial infarction (heart attack) and have impaired pumping function in the lower chambers (ventricles).
- People who are diagnosed with heart failure.

How Long Do ICDs last?

- ICDs effectively guard against sudden cardiac arrest for up to seven years, depending on the model of the device and the individual patient use.

The Sudden Cardiac Arrest Association's mission is to prevent loss of life from sudden cardiac arrest. We seek to increase awareness, encourage training for immediate bystander action, increase public access to defibrillation and promote the use of available medical devices and therapies, principally, implantable cardioverter defibrillators (ICD). SCAA members are the beneficiaries of improved science and medical technology, coupled with the wisdom and caring of thousands of physicians. For more information, please visit us at www.suddencardiacarrest.org