



## What is interventional radiology and who are interventional radiologists?

### Interventional radiology (IR)

is a medical specialty that uses minimally invasive, image-guided therapies to treat a wide variety of diseases and conditions.

Interventional radiologists (IRs) are board-certified physicians who perform these precise, targeted treatments with less risk, less pain and less recovery time than traditional surgery. Interventional radiology is delivered in collaboration with the patient's care team to ensure the right treatment and best possible outcome for patients. Pioneered in the mid 1960s, IR creates new ways to treat patients without surgery.

### What other treatments do interventional radiologists perform?

- **Biopsies:** Your treatment plan may require a biopsy. IRs perform biopsies on masses or tumors found in almost any part of the body.
- **Venous access:** Many medical procedures require special, long-term access to veins. Venous access, similar to an IV, delivers medications and enables dialysis in cases of kidney failure. These help continue vital treatments prescribed by your doctor.

### Should I be concerned about the medical imaging radiation used in the procedures?

Safety is a primary concern of all interventional radiologists. The highest standard of patient safety has been incorporated into the development of these treatments, starting with training in radiation safety and injury prevention, radiation physics, and the effects of radiation on patients. Safety, training and technique standards set by the Society of Interventional Radiology are often used by federal and state regulatory groups, hospitals, and other medical specialists who use radiation in the treatment of disease.

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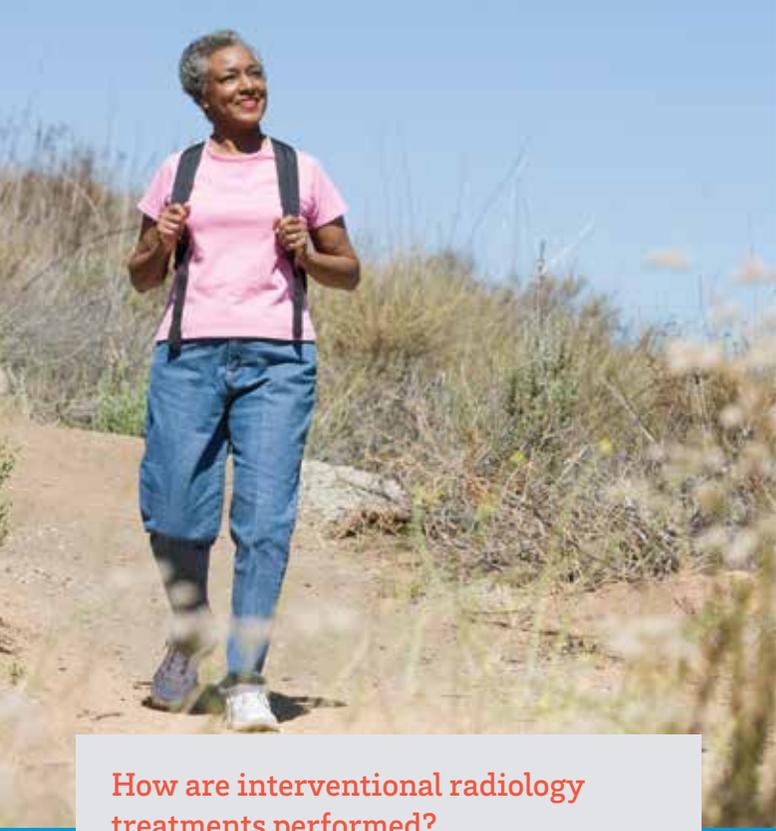
For more information on how interventional radiology can help you, the Society of Interventional Radiology's website, [sirweb.org](http://sirweb.org), provides easy-to-use tools to find a local interventional radiologist. He or she will be able to answer any additional questions you may have.

**Society of Interventional Radiology**  
3975 Fair Ridge Drive, Suite 400 North  
Fairfax, VA 22033  
**Phone:** (703) 691-1805 / **Fax:** (703) 691-1855

FIND US ON  
[sirweb.org](http://sirweb.org)



# What is interventional radiology?



## How are interventional radiology treatments performed?

Interventional radiologists harness the power of image-guided technologies such as X-rays, ultrasound, CT scans and MRIs to look inside a patient's body to pinpoint the problem. With this imaging map, IRs use tiny, elongated tubes called catheters to travel the body's pathways, such as the vascular system, to target diseases or tumors directly at their source. These procedures are performed without surgery and often with only a small incision in the skin. Patients are given medication intravenously to relax them (sedation) and to help with any pain. Many treatments are performed on an outpatient basis, reducing the likelihood of an overnight hospital stay.

## Why should I have an interventional radiology treatment instead of surgery?

- Interventional radiology treatments are less invasive and carry fewer risks than most surgeries.
- Most patients leave the same day as the procedure or require only a short hospital stay.
- General anesthesia is rarely needed.
- Pain and recovery time are significantly reduced.

## What do interventional radiologists commonly treat?

Interventional radiologists treat people who are suffering from a wide variety of conditions. Some of these include:

- **Cancer:** Various types of cancer may be treated through chemoembolization or ablation. In chemoembolization, the interventional radiologist cuts off the tumor's blood supply and delivers chemotherapy directly to the tumor. Ablation uses extreme heat or cold to kill the tumor, while saving the surrounding organs or tissues.
- **Pain and leg weakness:** IRs can successfully treat the pain and weakness associated with unsightly varicose veins or peripheral arterial disease (PAD), which is often a result of hardening of the arteries. IRs treat PAD with a balloon or stent (a tiny mesh tube) to open blockages. Sclerotherapy (the injection of a liquid solution) and ablation can reduce pain and shrink varicose veins.
- **Deep vein thrombosis or pulmonary embolism:** Blood clots found in the legs or lungs can be removed with treatments and clot-busting medications delivered directly to the affected veins without any damage to the vein or surrounding tissue.

Pulmonary embolism occurs when blood clots in the legs dislodge and travel to the lungs. This can be fatal. Placement of an inferior vena cava (IVC) filter, a small metallic device placed in the main vein that drains fluids from the legs, can help prevent those clots from moving to the lungs.

- **Pelvic pain:** Benign uterine fibroids are one of the conditions that can cause pelvic pain. IRs treat this by cutting off the blood supply to the fibroid, causing it to shrink and improving symptoms.
- **Osteoporosis:** Osteoporosis can cause spinal bones to fracture. IRs can strengthen these bones with a treatment called vertebroplasty, which uses medical-grade cement to reinforce broken bones.
- **Infertility:** IRs treat infertility in both men and women. In men, IRs can treat enlarged varicose veins in the scrotum called "varicoceles" nonsurgically by blocking the blood supply to these veins. In women, they can open blocked fallopian tubes.

