

## Radiation exposure from Interventional Radiology

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This handout will help to answer your questions about Interventional Radiology.

If you have other questions, please ask one of our staff and they would be glad to explain things to you.

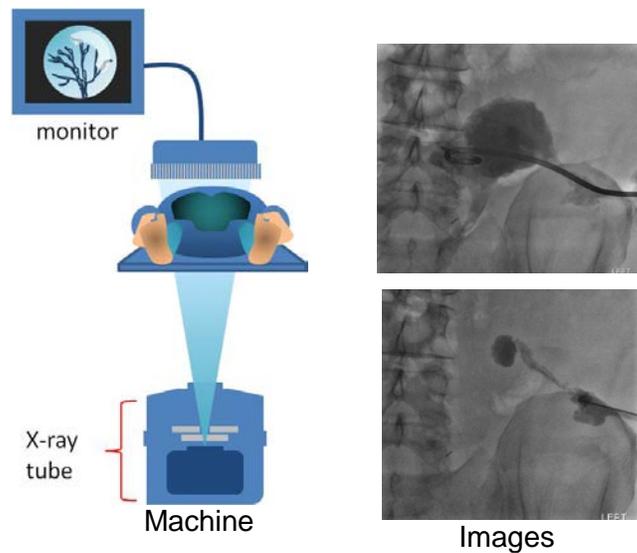
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## What is Interventional Radiology (IR)?

By using Interventional radiology (IR), doctors can diagnose and treat illness using small instruments and imaging. Through tiny cuts in the skin, IR doctors use small needles or fine tubes to guide small instruments to areas in the body. These needles or tubes are guided using X-rays or ultrasound. IR often replaces the need to have surgery with a larger cut or incision.

## What sort of things can IR treat?

There are many conditions which can be treated by IR. These include opening or closing blood vessels, draining fluid, taking biopsies and treating tumors. The advantages of IR include reduced risks, shorter hospital stays, greater comfort, quicker recovery and return to work.



## Where are IR procedures done?

IR procedures may be done in a room, called an “angiography” or “special procedures” suite. It is like an operating room.

Some may be done using a CT scan, MRI, or ultrasound procedure.

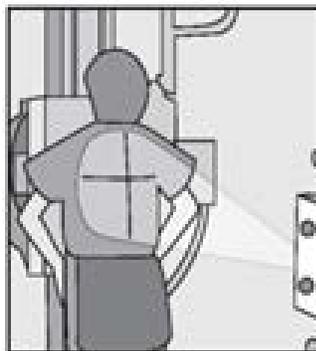
The IR doctor will choose the best equipment for your condition.



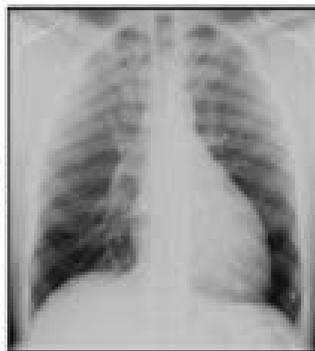
## How is IR different from an X-ray?

An X-ray is a beam of radiation, similar to light, that can enter the body. A machine sends an X-ray beam through a patient.

Some of the X-rays are stopped by bones and organs, creating a “shadow”.



X-Ray machine



X-ray \*\*

## How is IR different from an X-ray? (continued)

IR uses “real time” X-rays that can show things like a heart beating. It is like a video taking live pictures compared to a camera taking still pictures. This type of X-ray is called fluoroscopy.

## How much radiation is used?

Since IR procedures use X-rays, you may be given some radiation. The amount of radiation used can be compared to the amount of background radiation we receive every day. All of us receive small amounts of background radiation all the time – mainly from the sun and the soil. The average amount of radiation received during an IR procedure is equal to a few years of background radiation.

Source of Radiation	Days of Background Radiation
3-hour Airline Flight	1½ Days
Chest X-Ray	2 Days
Head IR Procedure	4 to 12 Months
Abdomen IR Procedure	1 to 5 Years

## Is radiation harmful?

Even though you may receive radiation equal to a few years of background radiation, the risk of this radiation being harmful is still very low. Research has shown that the risk of getting cancer from radiation received during one or more IR procedures is low and very difficult to detect.

Having an IR procedure can provide medical benefits that are far greater than the risk from radiation that the procedure uses.

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## How can I have the lowest risk possible?

Here at the hospital, we use the lowest amount of radiation needed for each IR procedure. The amount of radiation used will depend on your size and your illness.

The easiest way to have the lowest risk is to do the procedure only as needed. Your doctor will only do the procedure when the benefits are much greater than the risks from the procedure.



## What should I do if I still have concerns?

Discuss any concerns with the doctor ordering the examination. If your doctor cannot answer your specific question, he or she may contact one of the radiologists on staff.

If you wish to speak with a doctor before you have an IR procedure today, one of our staff members can page a radiologist.

The radiologist will speak with you as soon as they become available.

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## Contact information

Hamilton General Hospital  
905-521-2100, ext. 46514

McMaster University Medical Centre  
905-521-2100, ext. 75251

Juravinski Hospital  
905-521-2100, ext. 42247

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