

X-RAY RADIATION & YOUR HEALTH

The answers you need about the safety of X-ray exams

What is an X-ray?

X-rays are a form of radiation that can be used to diagnose illnesses or injuries. Diagnostic X-rays are able to pass through body tissue and provide an internal image of your body. This helps your doctor make a diagnosis without having to perform an invasive procedure.

What is radiation?

We are all exposed to radiation, which is a form of energy, every day from natural sources. The sun, naturally occurring materials in our own bodies and rocks all give us exposure to radiation. Radiation exposure is measured in rem or millirems. During the course of one year, the average person is exposed to close to 350 millirem from natural sources.

Are X-rays safe?

The amount of X-ray radiation you are exposed to during an exam is minimal. For most routine diagnostic X-rays, your radiation exposure is equivalent to only days or weeks of radiation from natural sources. For example, the radiation from a chest X-ray is equivalent to one week of radiation from natural sources. Other procedures, such as barium enemas and IVP exams, require more radiation. If your doctor has referred you for this type of exam, it is because he or she believes that the benefits of the exam outweigh the possible risks.

What should I expect during an exam?

You may be asked to change into a gown, depending on your procedure. All jewelry and metal objects should be removed so they do not block the X-rays.

Can I have an X-ray if I'm pregnant?

If you are pregnant or think you may be pregnant, be sure to discuss this with your doctor before the exam. It is also very important to tell the nurse or technologist you are pregnant so special precautions can be taken to minimize the amount of radiation exposure to your baby. In most cases the amount of radiation your baby receives is very minimal, less than the baby would receive from an airplane trip.

Other types of diagnostic imaging:

There are two other types of imaging that can be used to diagnose or monitor current conditions that do not use X-rays:

- Magnetic Resonance Imaging, or MRI, uses radio waves
- Ultrasounds use sound waves.