

Medical Radiation Exposure

What is radiation?

Radiation is a form of energy used in common medical tests. These tests help the doctor diagnose or treat a problem by providing clear images. Common tests that use radiation are:

- X-rays
- CT scans
- Many Interventional Radiology exams
- Fluoroscopy exams
- Nuclear Medicine exams

MRI and ultrasound exams do not use radiation.



Where does it come from?

Natural radiation is found in food, the air and the ground. It even comes from space. A medical test adds a very small amount of radiation compared to the natural sources.

Are there risks that come with exposure?

Exposure to high doses of radiation increases the risk of cancer and other damage to our bodies. Medical tests have a very low dose. The added cancer risk, for most medical tests, is so small that it can't be measured.

Your child's safety is our highest priority

Special skills are needed to take medical images of children. Children's Hospital of Wisconsin imaging staff have these special skills. This means we take fewer pictures. We are always looking for new ways to improve safety and quality. To do this, we:

- Invest in technologies and equipment that reduce radiation exposure.
- Reduce the dose of radiation to the lowest amount possible for each child. We use just enough to get high quality images.

For more information about the use of medical radiation in children, please see the Image Gently Web Site at www.imagegently.org.



What can you do?

- Discuss planned imaging tests and alternatives with your doctor. Ask questions such as:
 - Is this test really needed? Are there other options?
 - What information will this test give you?
 - How will it help my child's care?
 - What happens if the test is not done?

Keep a record of the medical imaging tests that your child has had. This may help prevent having the same test done twice. You can find a printable imaging record at www.radiologyinfo.org/en/safety/

This teaching sheet is meant to help you care for your child. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment, and follow-up.