

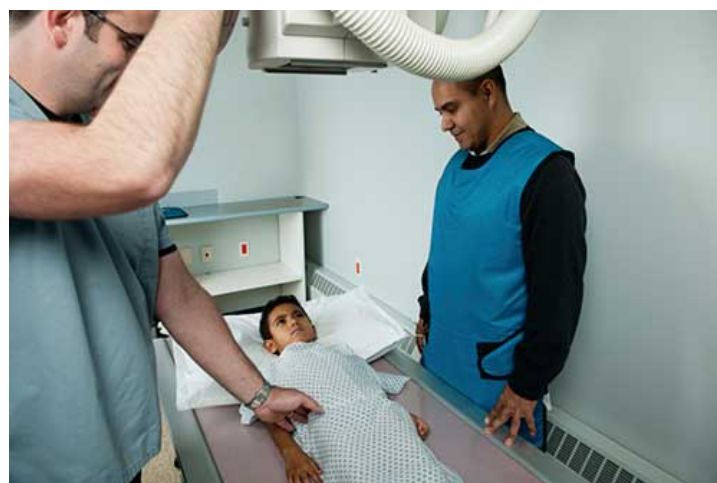


Children and Radiation Safety

Is it safe for my child to have x-rays?

Medical imaging is valuable. Imaging examinations help physicians make accurate diagnoses that can lead to proper treatment for your child's illness.

Radiation can also be used to effectively treat certain conditions. However, there is a small risk involved. Everyone is exposed to small amounts of background radiation daily. Beyond that, radiation exposure can occur in different ways.



Some imaging exams use radiation; others do not

Many types of medical imaging exams use radiation to produce diagnostic information.

Plain x-rays, fluoroscopy (live x-rays) used for upper GI and lower GI exams, computed tomography (CT) scans, and all nuclear medicine tests involve radiation while ultrasound imaging and magnetic resonance imaging (MRI) do not. For more detailed information, see the Upper GI and Lower GI pages.

What are the effects of radiation?

Large doses of radiation from some procedures may cause temporary skin burns. However, a greater concern is that radiation may cause cancer. There is no conclusive evidence that small amounts of radiation cause cancer, but large population studies have shown a slight increase in cancer from large amounts of radiation.

Is the benefit worth the small risk?

To determine if the benefit is worth the risk, there are some questions you should ask your doctor, including:

- Is the imaging test medically necessary?
 - If the answer is yes, then the benefit will most certainly outweigh the risk.
- Can previous tests substitute for this exam?
 - If your child has had other exams that your doctor is not aware of, make sure your doctor receives copies of those exams. You may be able to avoid repeating exams your child has already undergone.
- Are there alternative exams that do not require radiation?
 - Ask your doctor if ultrasound or MRI can be substituted.
- Is the facility familiar with imaging children?
 - Children should have examinations properly tailored for their size.

One size does not fit all

With radiation exposure, one size does not fit all. This is a point of emphasis of the Image Gently® campaign, developed by an alliance of medical societies and professionals focused on radiation safety for children.

Are the facility and its equipment accredited by the American College of Radiology (ACR)?

Accreditation in United States facilities ensures a high standard of image quality, ongoing oversight by a medical physicist, and proper monitoring of radiation exposure.

Additional safety information

For more information about radiation safety, visit:

- ImageGently.org – Focuses on children imaging.
- ImageWisely.org – Focuses on adult imaging.

Disclaimer

This information is copied from the RadiologyInfo Web site (<http://www.radiologyinfo.org>) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in

several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at <http://www.radiologyinfo.org> to view or download the latest information.

Note: Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

Copyright © 2018 Radiological Society of North America, Inc.