Children’s Imaging Guide: X-RAYS
The David & Judy Hess Children’s Imaging Center at Renown Children’s Hospital was designed with the needs of children and their families in mind. The Children’s Imaging Center provides comprehensive imaging services to our youngest patients with a team specially trained in pediatric radiology. And we are proud to participate in Image Gently — a nationwide campaign working to reduce radiation exposure to children.

What Are X-RAYS?

X-ray imaging is the most common type of diagnostic radiology. X-rays are invisible beams of ionizing radiation that pass through the body and are altered by different tissues to create two-dimensional images of bones, lungs and other organs, and some soft tissues. These exams are not painful, but they do require your child to remain still for the picture.

What Happens During an X-RAY?

A technologist will bring you and your child into the exam room, and position your child on the X-ray table. It may feel cool due to air conditioning used to maintain the equipment. The technologist will then place a digital recording plate under the table in the area of the body being imaged. Pillows or other items may be used to help your child maintain the proper position. And, the technologist will place a lead apron over your child's pelvic area or chest when possible to protect from radiation. X-ray images are captured by a large camera, which the technologist operates from behind a wall in the room. Your child, who will be awake throughout the procedure, must remain very still and occasionally hold their breath for a few seconds while each X-ray is taken.

The length of time needed for each X-ray depends on the type of X-ray that was ordered for your child. A typical X-ray takes about 10 minutes for positioning and less than a second for the actual X-ray exposure. Generally at least two X-rays are taken for each exam.

Your child won’t feel anything — there is no pain associated with X-rays. Although the procedure may take several minutes, actual total exposure to radiation is usually less than a few seconds. The benefit of an accurate diagnosis far outweighs the exposure to radiation that occurs during an X-ray.

What Happens AFTER an X-ray?

When the X-ray is complete, you’ll be asked to wait briefly while the images are processed. If they are blurred or unclear, the X-rays may need to be retaken. Once all images are deemed satisfactory, our radiologist will review your child’s images and provide a written report of the findings and diagnosis to your doctor, who can then discuss the results with you.

Preparation for all X-ray exams will be discussed at time of scheduling.
What Are the Risks?

Typically, X-rays are very safe. Although there's some risk to the body with any exposure to radiation, the amount used with X-rays is small and not considered dangerous. Our radiologists use the minimum amount of radiation necessary to get the best results.

How Should I Prepare My Child for an X-ray?

It is helpful to discuss with your child why an X-ray is needed. You can describe the room and the equipment used, and reassure your child that you'll be right there for support. For older kids, be sure to explain the importance of staying still while the X-ray is taken so the procedure won't have to be repeated.

If you are pregnant, you will not be able to be in the X-ray room during the procedure. So make arrangements for another family member or trusted friend to attend the appointment if you wish to have someone accompany your child throughout the exam.

What Should I Expect the Day of My Child’s X-ray?

The day of the appointment, arrive at the Renown Institute for Heart & Vascular Health, on the ground floor of Renown Regional Medical Center. After check-in, you will be taken to the David & Judy Hess Children’s Imaging Center to await the exam. If it is an emergency, you will enter through the ER.

There is no special preparation required for most X-rays. Your child can eat and drink as usual unless you receive specific instructions otherwise when you make the appointment. Bring a favorite book, toy, electronic device or a comforting object to occupy your child during wait times.

If You Have Questions

If you have questions about why an X-ray is needed, speak with your doctor. You also can talk to the technician before the procedure or contact Children’s Imaging at 775-982-8100.

About Image Gently Campaign

The Image Gently Campaign involves a group of healthcare organizations that promote safe, high-quality pediatric imaging throughout the world. The educational campaign, created by the Alliance for Radiation Safety in Pediatric Imaging, comprises more than 50 different societies, including the Society for Pediatric Radiology and the Pediatric Imaging Council of the Society of Nuclear Medicine. All combined, they are a group of more than 700,000 healthcare professionals in radiology, pediatrics, medical physics and radiation protection. More information can be found at imagegently.org.