

Fact Sheet: Your Child's MRI – What to Expect

Magnetic resonance imaging (MRI) is a diagnostic procedure that uses a combination of a large magnet, radiofrequencies, and a computer to produce detailed images of organs and structures within the body.

Using MRI, we can diagnose and evaluate your child's function and/or structure of the heart and the blood vessels.



What to expect:

- The test will last about 1 to 2 hours.
- The test is painless with minimal discomfort.
- Your child will lie on a table that can slide into the MRI scanner. The MRI scanner is a large tube-shaped machine made of magnetic material. Radio waves interact with the magnet to produce an image of the heart without touching the patient (this is why MRIs are considered a non-invasive test).
- An MRI technologist sits just outside of the MRI scanner, behind a glass window, and will speak to your child through a microphone that can be heard inside the MRI scanner room and that allows the staff to hear your child. Your child will be in constant sight of the technologist and staff.
- During the exam, we will sometimes ask your child to hold his or her breath for a few seconds at a time. Our technologists and staff will coach the patient on how to do this before the exam.
- Most patients will need an intravenous line (IV), usually in the arm or hand, so that contrast (called gadolinium) can be used to better visualize the heart and blood vessels. If contrast is required, a skilled nurse or technologist will start an intravenous line (IV) prior to the examination. The IV will be removed immediately after the exam.
- If requested, a child life specialist will help your child through the exam.
- Sometimes we allow children to listen to music or watch a movie during the exam (as long as they can also pay attention to the instructions the technologist is giving them throughout the MRI).
- The MRI machine will make loud clicking and clanging noises as the magnetic field and radio waves are created. Your child will be given ear protection and a headset so that he or she can still hear the instructions from the technologist.
- In some circumstances (such as smaller children that have difficulty lying still for a longer period), sedation or general anesthesia may be needed, which will be provided by a highly skilled pediatric anesthesiologist from NewYork-Presbyterian/Weill Cornell Medical Center.