

700 Children's Drive
Columbus, Ohio 43205-2696
nationwidechildrens.org

MRI (MAGNETIC RESONANCE IMAGING)

Magnetic Resonance Imaging (MRI) is a method of examining the inside of the body. The MRI machine is a large magnet that surrounds the body (Picture 1). It uses magnetic fields and radio frequencies instead of X-rays to produce images. The image on the screen is recorded by a computer.

WHAT TO BRING FOR THE TEST

Have your child bring a favorite cuddling toy or blanket to keep with him during the test. (The toy may not have any metal in or on it.)

BEFORE THE TEST

- **Clothing** - Dress your child in comfortable clothes with no snaps or zippers (sweat pants and T-shirt, for example). **Any objects containing metal (such as hairpins, watches, or pajamas with metal snaps) or any body piercing, must be removed because metal can affect the test.** Tell the technologist if your child has any tattoos.
- **Sedation** - If your child cannot hold still while the pictures are being taken, he *may* need to be given some medicine (sedation) to help him relax and make him sleepy. A nurse will complete a history and physical exam on your child, and explain the sedation.
 - **If your child is ill with a fever, "stuffy nose", or cough, you may need to be rescheduled.** Please call the Radiology Department and speak to a technologist or nurse.
 - **A parent or legal guardian needs to be here if the child is to be sedated.** They will need to give information on the child's health and sign a form giving consent for sedation. If a parent or guardian is not available, please have a phone number where a nurse can reach them at the time of the test.
 - If your child is to be sedated, it may be helpful to bring your stroller from home.
- **Sleep** - Your child must be sleepy for the test. The night before the test, keep your child awake 2 hours later than his normal bedtime. Wake him 2 hours earlier than normal in the morning.
- **Food and drink** - Your child may eat normally until 6 hours before the test. Your child may have *clear liquids* (water, clear apple juice, 7-Up, or Pedialyte®) up to 2 hours before the test.
- **Medicine** – If your child needs sedation it will be given by mouth, by rectum (in the child's bottom), or by IV. The radiologist and nurse will decide how the medicine will be given, depending on the age and weight of your child and the length of the test. The nurse may put a numbing cream on your child's hand, arm or foot 20 to 30 minutes before an IV is started.

For Outpatient Use Only

Child's name _____

APPOINTMENT:

Date _____

Please bring your child to the MRI Department to register. The MRI Department is in the main building of Children's Hospital on the first floor.

Arrival time:

- If your child needs to be sedated, you need to arrive **60 minutes before your scan time**. This allows time to register, fill out a medical history form. A nurse will complete a history and physical and explain the sedation that will be used.
- If your child **does not need to be sedated**, we need you to arrive **30 minutes before your scan time**. This allows you time to register and fill out screening sheets.

Scan time _____

If you need to cancel your appointment or reschedule, call (614) 722-6200, Radiology option.

HOW THE TEST IS DONE

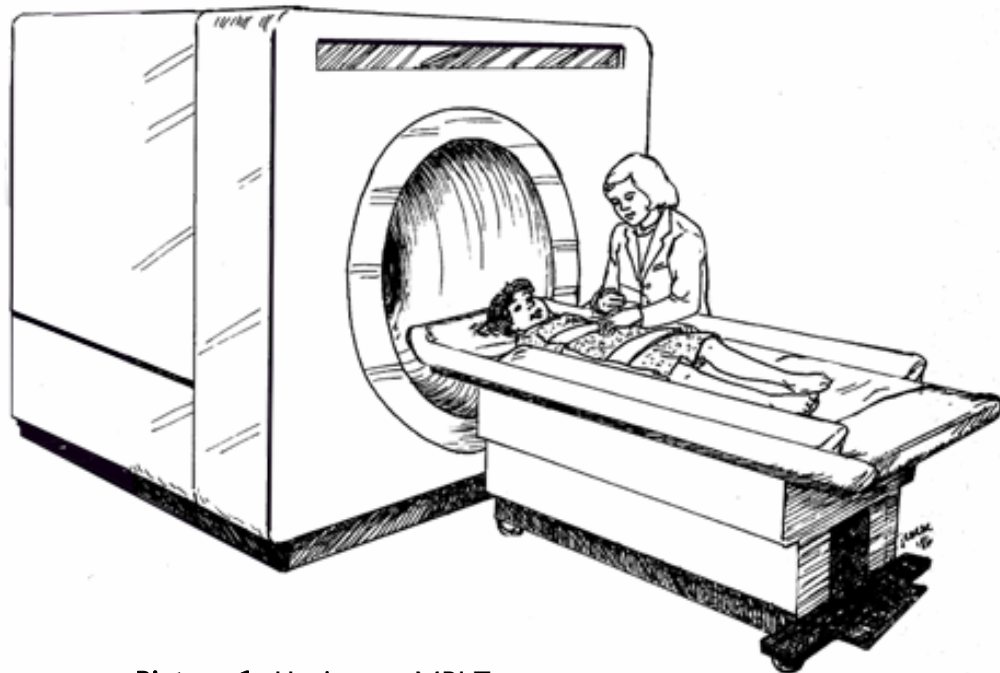
A parent may stay with the child in the MRI room while the test is being done. If you would like to stay with your child during the test, please tell the technologist.

- After your child falls asleep, a technologist will place your child on a padded table. If the brain is to be examined, a device that looks like a helmet will be placed over and around the child's head.
- Next the technologist will move the table so that your child's body is inside the opening of the magnet. If your child is not sedated, it is important for him or her to hold very still during the test.
- Your child will be given earplugs to wear or a set of headphones to listen to music. Your child will not have any pain with this test, but will hear a sound like a loud tapping or hammering.
- Your doctor may ask that your child be given contrast solution during the test to help the images show up better on the film. An IV will be started and the contrast solution will be put in the IV. After the contrast is given, the IV will be removed and the scan will continue.
- The technologist and a nurse (if your child is sedated) will be outside the room during the test but will be able to see and monitor your child. If your child has been sedated, he or she will be connected to a heart monitor and pulse oximeter so the nurse can check your child's heart rate and breathing during the MRI test.

Depending on the type of test your child is having, the exam may take 20 to 90 minutes to complete. When the test is over your child will be given apple juice or Pepsi Cola to drink. If your child prefers something else, please bring it with you.

AFTER THE TEST

- If your child has been sedated, you will need to stay in the MRI area for 30 minutes to one hour after the test is done. He needs to be awake before going home. He should not return to school or day care the day of the MRI test. He needs to be supervised by a parent or other caregiver the rest of the day.
- Your child will be given apple juice, a cola drink, or a drink brought from home.
- The nurse will give you home-going instructions for your child.
- A report of the test will be sent to your child's doctor within 48 hours. When they get the results, they will explain the test to you.



Picture 1 Having an MRI Test.

If you have any questions, be sure to ask your doctor, nurse or technologist, or call at (614) 722-6200.