# UNM HOSPITALS

# MRI EDUCATION

MRI, or Magnetic Resonance Imaging, is a medical test that helps doctors look for and treat many different medical problems. MRI scanners use a strong magnetic field and computers to create detailed pictures. MRI does not use x-rays to make pictures. Some people can not have an MRI because items in their bodies may be unsafe near the powerful magnet in the MRI machine.

Some uses for MRI scans are:

- Checking inside the chest, abdomen and pelvis to look for tumor, fluid buildup or infection
- Checking the breasts to look for disease, structural abnormalities, cysts or tumors
- Checking the heart to look for disease, structural abnormalities or tumor
- Checking the brain for tumor, bleed, stroke, infection or spread of cancer
- Looking for broken bones (fractures) or healing fractures
- Looking at soft tissues for ligament or tendon injury or for tumor detection
- Evaluating blood vessels for aneurysm, hardening, clot or injury
- Planning for radiation treatments for cancer
- Getting ready for and checking the results of surgery



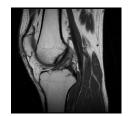
Only trained, licensed and certified technologists are allowed to do MRI scans at UNMH. Students work with licensed technologists.

# GETTING READY FOR YOUR TEST

For your MRI exam, you will be asked to fill out a form. The information you give us on this form helps us make sure you are safe to have an MRI exam. Please let us know if we can help you with the paperwork. Let us know if you have any implants in your body. We may need to research them to make sure they are safe to go in the MRI scan room. This may cause a delay in your scan start time. However, it is important we make sure you will be safe during your MRI. Before your exam you may be asked to change into a gown. You will be asked to take off your jewelry, glasses and all other items from your clothing so they do not interfere with the MRI exam. All your personal items will be placed in a locker for safe-keeping. You may choose to leave them with a friend or family member in the waiting room. You may need to have blood taken before we start your MRI to make sure your kidneys are working properly. Please tell your tech if you have diabetes, have kidney problems or if you have had a reaction to MRI contrast or dye in the past. Sometimes it may be necessary for you not to eat or drink before an MRI test. Also, some patients have to drink a special fluid before the MRI. You will receive a phone call two days before your test to tell you what is needed for your test. Unless you are told otherwise, continue your normal daily routine and take your medications as usual.

#### HOW IS THE TEST DONE?

When we know it is safe to do your MRI exam, you will be taken to the examination room. You will be asked to lie down on the exam table. If one is needed, an IV will be started and you will be moved into the MRI machine.



## MRI of the Knee

The machine looks like a short tunnel that is open on both ends. During the test, the machine makes loud pounding noises. You will be given either headphones for music or earplugs so you can be more comfortable during the test. If you do not like small spaces (claustrophobia), let your tech know so they can help you through your test. Many sets of images will be taken during your test. For some pictures you may have to hold your breath for a short time. If dye or contrast is needed for your test, the tech will perform the injection at about the middle of your test. It is important you hold still when you hear the loud noises from the machine. Do not move the part of your body we are examining at any time during the test. We may need to use cushions, straps or sandbags to help hold you in the proper position. Please follow all instructions you are given during your examination. By doing this, you are helping get the best pictures. A parent or caregiver may stay in the exam room (after they have been checked for metal or implants) to help children with the exam.

#### WHAT HAPPENS AFTER MY MRI IS DONE?

A radiologist, a doctor specifically trained to read radiology exams, will evaluate your MRI and send written results to your doctor. You will get your results from your doctor, not from the staff in Radiology.

### MRI, PREGNANCY AND BREASTFEEDING

Female patients should always let their technologist know if they might be pregnant or if they are breastfeeding. Some exams may not be done if you are pregnant or breastfeeding.

MRI scan of the Brain