



<b>Exam Duration:</b>	Approximately 30 - 60 minutes per exam	<b>IV Required?</b>	If ordered with IV Contrast
<b>Exam Preparation:</b>	For exams ordered with contrast, do not eat or drink 2 hours prior to exam regardless of the body part being imaged. For abdominal MRI, do not eat or drink 4-6 hours prior to exam		

MRI—or Magnetic Resonance Imaging—utilizes radio frequency pulses emitted from a large magnet to image specific areas of the body. When exposed to these radio frequencies, hydrogen atoms within the body emit a return pulse (resonance) that is detected by the machine and converted into a highly detailed cross-sectional image. Varying techniques are used to highlight different structures within the body. On average, 6 to 8 sequences (each consisting of 20-25 images) are acquired per study.

**What to expect:** In order to create images, a coil must be placed over the area of interest. This coil may have the appearance of a football mask (used over the head) or large ribcage (used over the torso). By necessity, the coil will be close to your body. Patients with severe claustrophobia are advised to contact the ordering physician *prior to their study* to obtain oral anti-anxiety medication. The hospital cannot provide oral medication for patients on the day of the procedure. On a similar note, patients who require pain management to lie still for an imaging study should take their prescribed medication prior to the exam. In most cases, oral medication should be taken approximately 30 minutes prior to imaging for maximum effectiveness.

The MRI machine produces various loud pulsing, static, and knocking noises throughout the exam. If possible, headphones will be provided and tuned to an FM station of your choice. If not, earplugs will be provided instead. Staff will communicate with you between each sequence of images over the headphones or loudspeaker, confirming your comfort level and letting you know how long the next series of images will take. A signal button will be provided as well should you require immediate assistance.

**Precautions:** MRI is contraindicated for most implanted electronic and mechanical devices such as pacemakers, mechanical heart valves, neurostimulators, implanted drug pumps and certain aneurysm clips or coils. If you have implanted devices it is important to bring any card or information you have on that device with you at the time of your study for the technologist to confirm that it is MRI compatible. If staff does not have the information on your implant at the time of your study you will likely be rescheduled to a later time so we can research and confirm that your implants are MRI compatible and you will not be injured by having the MRI.

**Exam Procedure:** Upon your arrival, an MRI technologist will explain the exam in detail and ask you to fill out a detailed form about your surgical and medical history. In some cases, additional screening (such as X-Rays) is necessary to clear a patient as safe for MRI. For exams ordered with IV contrast, an IV will be started in your arm if you do not already have one. In most cases, you will be required to change clothes, and all metal must be removed from your body. Your personal belongings will be stored in a locker; you will be able to keep the key to this locker with you throughout the exam.

You will be positioned on the imaging table—usually on your back, but sometimes on your stomach—and moved into the gantry. Staff will remain in contact with you throughout the exam and inform you of any upcoming changes in position. Depending on the study, it may be necessary to hold your breath for short periods of time (instructions will be provided). You may feel some vibration as the machine is completing its scans; this is a common occurrence and should not cause any discomfort.

**Additional Notes:** The weight limit on our table is 350 pounds. However, body habitus often plays as important a role as weight in whether or not a patient can be scanned. Contact the department if you have any questions. Images will be interpreted by a radiologist; the report should be sent to the ordering physician within 24 hours.

**Please feel free to contact the MRI department with any questions at (405) 307-2167 or (405) 515-2667.**