

What is Cardiac MRI?

MRI (Magnetic Resonance Imaging) is a painless test that produces detailed images of many areas in the body. MRI does not use any radiation, rather it uses radio waves and a very strong magnetic field. Cardiac MRI is a specialty exam that covers the structures and function of the heart.

Why is Cardiac MRI done?

- Cardiomyopathy
- Assess for scarring in the heart muscle
- Cardiac masses and thrombi (blood clots)
- CAD (Coronary Artery Disease)
- Aortic Disease
- Arrhythmia
- Congenital Cardiac Disease
- Decreased Heart Function

MRI and Claustrophobia

Claustrophobia has become less of an issue with modern MRI scanners, due to the increased size and decreased length of the bore (round hole you lie inside). Whatever body part is being imaged must be in the center of the MRI unit (called isocenter), so your chest will be in the center of the machine. Most current MRI machines can accommodate patients up to 550 lbs.

If you are afraid you are too claustrophobic for MRI, talk with your doctor to see if pre-medication with a mild sedative is an option for you. MRI with full anesthesia is also sometimes used when needed.

How to Prepare

Because of the strong magnetic field and Radiofrequency used for MRI, some metal objects can pose a safety hazard. You will be asked MRI Safety Screening questions multiple times before your MRI exam. Certain implants require

additional arrangement, so it is important to address any safety concerns before the day of the test. It is especially important for your physician and your MRI Technologists to be aware of any of the following:

- Implanted Cardiac Devices (Pacemaker/Defibrillator)
- Stimulators (Brain, Vagus nerve, Bladder, Spine, neurostimulator, or any wires left from removed stimulators)
- Cochlear or ear implants
- Drug Pump (insulin, pain, Baclofen, etc.)
- IVC Filters
- Metal fragments in body from accidents/injuries
- Medication Patches

What to expect during the MRI exam

- Personal items (watch, wallet, keys, phone, etc.) must be removed and placed in a locker. The key will be inside the MRI room with you.
- You will be asked to change into a gown
- ECG monitors will be placed on your chest which are used to get the pictures of your heart
- Most times, an IV will be placed in a vein of your arm or hand which is used to inject MRI contrast during the exam
- Depending on the exam ordered, the test will require you to lie still for 45-90 minutes.
- You will be asked to hold your breath many times during the exam.
- The MRI machine makes very loud noise, similar to the level of a jack-hammer. You will be given earplugs or headphone with music to help reduce the sound level.
- The MRI Technologist can see you and is able to talk with you through a two-way intercom.
- You will have a call button that you can squeeze at any time if you need to communicate with the Technologist.

After the Exam

- Your physician will receive your test results 24-48 hours after the exam is complete. You can also view your results through the BHS Patient Portal.
- You may resume normal activities unless otherwise instructed by the MRI Technologist or Radiologist.



