



## CARDIAC MRI

### What it is

Cardiac Magnetic Resonance Imaging (MRI) is a non-invasive test used to image the heart. It utilizes a strong magnetic field and radiofrequency waves to create computer-generated images of the heart. Your doctor might order this test to evaluate the size and function of your heart chambers and valves, or to determine if there has been any heart muscle tissue injury or scar pattern. The MRI machine uses advanced technology to create 2D and 3D images of the inside of your heart and provide detailed moving images of the heart chambers and valves. Cardiac MRI is available at Royal Victoria Regional Health Centre.

### Performance/Preparation

MRI is a painless procedure that is very safe. The test uses powerful magnets to generate images, and so the test should not be performed if you have certain implantable devices such as:

- Pacemaker
- Implantable defibrillator (ICD's)
- Cochlear implants
- Neuro-muscular stimulators
- Implantable uterine devices
- Drug infusion pumps
- Aneurysm clips

In certain MRI scans, there may be an intravenous contrast agent used. This can cause problems if patients have advanced kidney disease. Your doctor will also ask you if you are claustrophobic to see if you need a mild sedative for the scan.

You will present to the hospital imaging department and be registered. You will lie down on the moving stretcher and slide into the MRI tube. The technologist will speak to you from another room and provide instructions to breath or hold your breath. The MRI machine will make a loud thumping noise that generates radio waves. The sounds can be loud and you will be provided with earplugs. You may require an intravenous line to administer a special contrast agent, which can highlight certain parts of your heart.

### Duration

The scan time will last approximately 30 – 90 minutes.

### Medications

You may take your medications as prescribed. Depending on whether you are claustrophobic, your physician may give you a mild sedative in the form of a pill to be taken 20-30 minutes prior to the MRI.

### Driving

There are no restrictions to driving commercially or privately after an MRI.