

MRI SAFETY PROTOCOLS



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Magnetic Resonance Imaging (MRI)

Magnetic resonance imaging (**MRI**) of the body uses a powerful magnetic field, radio waves and a computer to produce detailed pictures of the inside of your body. It may be **used** to help **diagnose** or monitor treatment for a variety of conditions within the chest, abdomen and pelvis.





Scope and Responsibilities

- Protect and educate all patients, direct and ancillary personal about the possible risks, associated with the MR Suite.
- To be in compliance with the most up to date MR safety information provided by the Joint Commission and the ACR.
- Prove helpful as the field of MRI continues to evolve and mature, providing MR services that are among the most powerful, yet safest, of all diagnostic procedures.

SAFETY GUIDELINES

Training of all technologists and nursing staff, and education of all attending physicians (primary care, radiologists and anaesthesiologists).

The protocols should be reviewed by the MRI medical team both periodically and following each change in the MRI suite environment

It should be ensured that policies and procedures are followed; training and safety certification for technologists and MRI staff is completed.

Important Signage used in MRI



MRI safe



Caution



NOT Safe

Specialty equipments for MRI

- **Wheelchairs**
- **Stretchers**
- **Monitors**
- **Oxygen cylinders**
- **IV pumps**
- **MRI Fire extinguishers**



Patient & Employee Screening

- All patients, family members, and staff **MUST** be screened by Level II personnel before entering the MRI environment.
- Level II personnel must ask questions regarding metal implants before patient is brought into the MRI room.
- Patient screening must be entered into radiology assessment before bringing the patient into the room.





What to Ask?

- Example of questions in radiology assessment.
- Level II personnel will ask all of the questions to the right.
- If any answers are yes, they will seek more information.

Metal Screen			
Hx Metal In Eyes	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Hx Working w/Metal	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Pacemaker / Cardioverter	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Aneurysm Clips	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Shrapnel / BB's / Bullets	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Body Art	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Orbit X-Ray	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Heart Valve Replacements	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Embolization Coils / Stents	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Dentures / Braces / Wigs	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Implants	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Hearing Aids / Ear Implants	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Other Metal Screen	<input type="radio"/> Y	<input checked="" type="radio"/> N	<input type="radio"/> U
Source Of Metal Hx.	PATIENT 5/17/201		

MRI Personnel

LEVEL ONE : MRI personnel at this level must pass minimal training to ensure their own safety in Zones I, II and III.

- Typical tasks include:
- Initial patient medical history
- Basic patient screening
- Administrative function for visitors, patient family and hospital staff.

LEVEL II: These employees are in charge of making sure the MRI area is a safe environment **AT ALL TIMES**.

- Examples:
 - MRI Technologists
 - MRI Nurses
 - Radiologists
- Absolutely **NO** other staff can have access to MRI

MRI ZONES



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Important Reminders

- **NEVER** bring metal into the room.
- **DO NOT** bring anyone into the MR environment without completing the metal screening process by level II personnel.
- Codes are **NEVER** to be run in the MRI room.
- Ferromagnetic items being brought into the MR environment can easily cause injury or death.

! CAUTION

Do not enter with following items.
कृपया निम्नलिखित चीजों के साथ प्रवेश न करें

! सावधान



Pacemaker
पेसमेकर



Bone Implant
धातु की हड्डी



Key, Watch, Jewellery, Etc.
चाबी, घड़ी, आभूषण इत्यादी



Patient Trolley
स्ट्रैचर



Mobile
मोबाइल



Gun
बंदूक



Silk Clothes
सिल्क (रेशमी) वस्त्र



Fire Extinguisher
अग्निशामक



Oxygen Cylinder
ऑक्सिजन सिलेंडर



Wheelchair
पहियेदार कुर्सी



Credit Card
क्रेडिट कार्ड



Tools
हथियार



Match Stick
माचिस



Vacuum Cleaner
वैक्युम क्लिनर



Electrical Equipments
विद्युत उपकरण

Please note: Patients and their attendants will be screened before entering the MR room
कृपया ध्यान दें : एमआर कक्ष में प्रवेश से पूर्व, मरीजों व उनके सहायकों की जांच की जायेगी ।

Informed Consent form

INFORMED CONSENT

I, Mr./Mrs./Ms....., have been explained in a language well understood by me to my satisfaction about the study being carried out. I exercise my own free willpower of choice, hereby give consent to "....." procedure conducted by Dr.....,Hospital / Medical College.

The attending doctors have informed me to my satisfaction and in the language best understood by me, the purpose of this procedure.

I am also aware of my right to opt out of the study without prejudice to further treatment at any time during the course of the study without having to give any reasons to do so.

Signature of the Attending Doctor:

Date:

Signature of the witness:

Date:

Signature/Left thumb impression of the patient

DATE

रोगी का अनुमति पत्र / सूचित सहमति (Hindi)

मैं, श्रीमान / श्रीमान / एमएस, अध्ययन के बारे में मेरी संतुष्टि के लिए मेरे द्वारा अच्छी तरह से समझी गई भाषा में समझाया गया है। मैं पसंद की अपनी स्वतंत्र इच्छाशक्ति का प्रयोग करता हूँ, इस प्रकार डॉ. द्वारा आयोजित "....." प्रक्रिया को सहमति देता हूँ अस्पताल / मेडिकल कॉलेज।

उपस्थित डॉक्टरों ने मुझे अपनी संतुष्टि और इस प्रक्रिया के उद्देश्य से मेरी समझ में आने वाली भाषा में सूचित किया है।

मैं अध्ययन के दौरान किसी भी समय प्रक्रिया के दौरान किसी भी समय ऐसा करने के किसी भी कारण दिए बिना प्रक्रिया से बाहर निकलने के अपने अधिकार से अवगत हूँ।

भाग लेने वाले डॉक्टर का हस्ताक्षर:

तारीख:

गवाह का हस्ताक्षर:

तारीख:

रोगी के हस्ताक्षर / बाएं अंगूठे की छाप

तारीख:



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THANK YOU

