

Magnetic Resonance Imaging (MRI) Technologist

Job description

Magnetic Resonance Imaging (MRI) is a procedure that creates images of the body using radio waves in conjunction with extremely powerful magnets. This non-invasive technique relies on the magnetic properties of atoms, rather than the radiation used in many other imaging procedures.

There are four disciplines under the heading “Medical Radiation Technologist.”

- Radiological Technologist
- Radiation Therapist
- Nuclear Medicine Technologist
- Magnetic Resonance Technologist

As an MRI Technologist you will:

MRI technologists utilize their communication, patient care and collaborative skills to interact with patients and other members of the health care team. They are responsible to ascertain each individual's safety in the MR environment before entering the magnetic field. MRI technologists utilize their knowledge of anatomy, physiology and the principles of MRI to safely and efficiently operate MRI scanners, assisting in the diagnosis of disease and injury. Effective MRI technologists are patient advocates who display reflective, responsible practice and have strong problem solving and technical skills.

Magnetic resonance images are used to:

- Image all areas of the body, most commonly used for neurological and joint imaging.
- Study the vascular system.
- Study the function of the brain.
- Detect tumors anywhere in the body and study their chemical make-up.

Some of a magnetic resonance technologist's duties include:

- Ensure the safety of patients, staff and visitors who come in contact with the powerful magnetic field of a MRI scanner.
- Explain procedures, answer patients' questions as fully as possible and provide emotional support.
- Position patients and coils on a table that slides inside the MRI scanner.
- Inject contrast media as required.
- Set appropriate technical parameters, operate MRI scanners and related equipment, and observe image data on computer monitors during scans.
- Guide and monitor patients during scans that may take up to 90 minutes to complete.
- Recognize and respond to life threatening situations.
- Assist in the education of other medical professionals.
- Keep records and compile research data.
- Routinely check scanners and related equipment.
- Follow all safety procedures for self, patients and machinery.
- Educate new staff and students of any teaching institutions.

Magnetic resonance technologists also work closely with other health professionals and administrative support personnel.

Work environment

Magnetic resonance technologists are employed in large, urban hospitals and clinics. Without further education, advancement opportunities can be limited.

Education

3 year accredited program

Required High School Courses:

- Physics
- Biology
- Math
- English
- Chemistry

Personal characteristics and skills

- A sense of responsibility and a high degree of integrity.
- Patience and adaptability.
- Sensitivity to the needs of ill and injured people.
- The ability to put people at ease.
- An interest in science and technology.
- The ability to maintain a high level of accuracy in their duties.
- Good organizational skills.
- Good problem solving and critical thinking skills.
- Effective communication skills.
- The ability to work well in a team environment.
- Ability to handle stressful situations.
- Enjoy using equipment to perform tasks requiring precision.
- Appreciate having procedures and standards for their work.
- Adept at compiling information for research data and statistics.

Employment and earning potential

- [Working in Canada](#)
- Capital Health \$ 44,179- 55,058 per year
- [Salary ranges in Canada](#)

More Information

- [Nova Scotia Association of medical Radiation Technologists](#)
- [Health Team Nova Scotia](#)
- [Canadian Association of Medical Radiation Technologists](#)