Medical Radiology/Radiation Technician/Technologist (MRT)

Overview	A medical radiology/radiation technologist performs X-rays, fluoroscopy, CT scanning, interventional radiography, bone density, mammography and operating room scans. They are responsible for ensuring the quality of the images are produced during the scan to be sent out to for radiologist's interpretation and followed the request the type of scan sent by the physicians. They may lead the team of radiation technologists, fellow imaging staff, and guide radiology students. Medical radiation technologists work at hospitals, diagnostic centers, clinics etc. They usually work alone with the patients but sometimes they may be a part of interprofessional team in a hospital setting.
NOC Code	Medical radiation technologists (3215)
Alias Job Titles	Chief radiographer; Diagnostic imaging technologist; Diagnostic medical radiation technologist; Diagnostic radiography technologist; Diagnostic radiological technician; Diagnostic radiological technologist; Diagnostic radiology technologist; Magnetic resonance imaging (MRI) technologist; Magnetic resonance technologist; Mammography technician; Mammography technologist; Medical radiation technologist; Medical radiation technologists supervisor; Medical radiographer; Nuclear magnetic resonance imaging (NMRI) technologist; Nuclear medicine chief technologist; Nuclear medicine clinical co-ordinator; Nuclear medicine clinical instructor; Nuclear medicine supervisor; Nuclear medicine technical co-ordinator; Nuclear medicine technical director; Nuclear medicine technician; Nuclear medicine technologist; Nuclear medicine technologists supervisor; Positron-emission tomography (PET) technologist; Radiographic technologist; Radiography chief technologist; Radiography clinical co-ordinator; Radiography clinical instructor; Radiography supervisor; Radiography technical co-ordinator; Radiography technical director; Radiography technologist; Radiography technologists supervisor; Radioisotope technician; Radioisotope technologist; Radiological technician; Radiological technologist; Radiology technologist; Registered radiology technologist; Registered technologist in nuclear medicine (RTNM); Registered technologist in

	radiation therapy; Registered technologist in radiography (RTR); X-ray (radiology) technician; X-ray machine operator - medical; X-ray technician;
Qualifications Required	1. High school diploma with at least 75% in Math, English, and Physics 2. IELTS and prior learning assessments for International students 3. MRTs are regulated by the Canadian Association of Medical Radiation Technologists and by provincial registering/licensing bodies
Salary Range	<table><tr><td>Average hourly</td><td>Range hourly</td><td>Average yearly</td><td>Range yearly</td></tr><tr><td>$36.81</td><td>$31.90 - $47.30</td><td>$71,780</td><td>$62,203 - $92,235</td></tr></table>
Job Demand	Lower Employment outlook is Good to Fair in most provinces. More information is available here.
Growth Opportunity	MRTs can move forward to teaching, information systems and administration with further experience and training. Specialization are possible with further education such as bone densitometry, MRI, CT scan etc.
Years' Experience Required	None. Requires a 2-year diploma program certificate from an accredited institution such as SAIT or NAIT
Training Options (if available)	Programs available at across countries. List of accredited programs can be found here.
Personal Qualities	Excellent communication skills; teamwork; leadership; time management; medical terminology knowledge; Interest to engage with patients/people and help them; ability to work in stressful situations; emotional resilience; compassion, empathy; detail oriented; reasonable physical strength and stamina
Notes/Other Information	Individuals may continue to postgraduate education into mammography and angiography fields.

	Medical radiation technologists may work full-time or part-time hours or on a call-in (casual) basis. Shift schedules may include a combination of day, evening, night and weekend shifts, as well as on-call duty. These jobs may be physically demanding to some extent as most of the time they may have to be on their feet and help patients onto and off the procedure tables sometimes. They can also be exposed to radiation and biohazardous materials during the job. At times, they may work in emergency conditions. These jobs may not be regulated in some provinces like British Columbia, but still a certification and registration with CAMRT/provincial certification/registration is required. Usually following the 2-years diploma in MRT a graduate can do X-ray and fluoroscopy. To be become a CT scan technologist one needs further training and/or certificate on top of MRT degree. Same procedure may apply to mammography (Breast Imaging- Screening [CBIS]) as well. There is a risk of radiation exposure in this job.
Steps towards capacity building to become competitive for this job	1. Get admitted into diploma program for medical radiologic technology in an accredited college in Canada. The admission into some colleges maybe competitive and require admission tests. 2. Complete a two to three-year program in medical radiologic technology with practicum 3. Write and pass the Canadian Association of Medical Radiation Technologists (CAMRT) examination 4. Register with an appropriate association or college according to your province, such as Alberta College of Medical Diagnostic & Therapeutic Technologists (ACMDTT), College of Medical Radiation and Imaging Technologists of Ontario (CMRITO), etc.
References and resources	i. Alberta Learning Information Service ii. Job Bank Canada iii. National Occupation Classification ESDC iv. Neuvoo v. Indeed