British Columbia's Medical Radiation Technologists

Submitted by the Canadian Association of Medical Radiation Technologists – British Columbia

MRTs Help Provide the Full Story

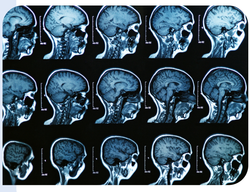
Medical Radiation Technologists (MRTs) are health-care professionals who perform medical imaging and radiation therapy procedures. Throughout B.C., MRTs practice in hospitals, clinics, academic institutions and cancer centres, performing millions of procedures each year that contribute to the diagnosis and treatment of patients in B.C.

MRT Certification and Specialization

The medical radiation technology profession involves a range of skill sets and specialized areas of practice. There are four MRT designations, each with their own certification examination: radiological technology, magnetic resonance, nuclear medicine and radiation therapy. Once certified, MRTs can build on their clinical skills by completing additional education and training to obtain a certificate in specialized areas such as computed tomography (CT), breast imaging, interventional radiology, positron emission tomography/computed tomography (PET/CT), dosimetry and more. Within their specialized areas of practice, MRTs apply prescribed forms of energy (ionizing radiation or electromagnetism) to patients for diagnostic or therapeutic purposes.

Radiological Technologists

use several different types of X-ray equipment to produce images of the body. They use digital X-ray, fluoroscopy, CT and mammography machines to obtain high quality diagnostic images. These images are used in a variety of ways to help patients, especially to see if there are signs of health conditions inside the body – like a bone injury, internal bleeding, enlarged glands or lymph nodes, lung disease, cancer and more. In situations where patients are unable to be transported to medical imaging, they may bring a mobile X-ray or fluoroscopy machine to other units, such as the emergency room, intensive care unit or the operating room.

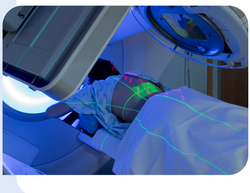


Magnetic Resonance Imaging (MRI) Technologists

operate MRI scanners to produce images of the body using radio frequency waves along with extremely powerful magnets. MRI scans provide detailed information about soft tissue structures in the body that may not be visible on X-rays or CT scans. These scans can help detect a wide range of soft tissue ailments, from tumors to torn ligaments, aneurysms, blood clots, traumatic brain injury, and seizures, as well to asses stroke patients. Because the magnetic field is always on, MRI technologists are careful to prevent accidents where personal belongings and medical devices can be affected by the magnetic field and cause a hazardous situation.

Nuclear Medicine Technologists

use radiopharmaceuticals to show images of organs and systems in the body in action. Instead of radiation coming out of the machine like with an X-ray or CT, the technologist administers a radioactive tracer to the patient, usually by way of injection. The radioactive tracer is designed to target a specific organ system or tissue type. Once the tracer is inside, the radioactive material is emitted, and the technologist can take images of it using a gamma camera or probe to see how that organ system or tissue type is functioning. These images can be used to detect signs of cancer, tumors, cysts, infections, hematomas, organ enlargement and more.



Radiation Therapists

use high energy radiation to kill or shrink tumor cells. At cancer centres throughout B.C., radiation therapists collaborate with radiation oncologists (doctors who specialize in cancer), medical physicists, nurses and many others to provide care to patients undergoing radiation therapy. Radiation therapists plan and deliver individualized treatments for what a patient needs. Their role is to deliver the prescribed dose of radiation to target cells, while reducing the radiation dose to the surrounding healthy tissue and organs.

MRTs are the essential link between patients and the sophisticated medical imaging and radiotherapy technologies in B.C.'s health-care system.

As a direct point of contact, MRTs play a significant role in supporting patients on their health-care journey. MRTs provide education to patients about their procedure or treatment and answer questions to increase understanding and reduce anxiety and stress. MRTs work collaboratively with other members of the health-care team to ensure patients receive compassionate, safe and quality care.

The Canadian Association of Medical Radiation Technologists (CAMRT) is the national professional association and certifying body for medical radiation technologists in Canada. CAMRT-BC is a unit of the association which represents MRTs in the province of British Columbia. The association promotes and advocates the value of the profession and delivers programs and initiatives to support MRTs in providing quality patient care.
Learn more at www.camrt.ca.

CAMRT-BC

We welcome your input and feedback. Contact us at: MOHNewsletteragov.bc.ca