

Medical Radiation Technologists

A guide for newcomers to British Columbia



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1. Working as a Medical Radiation Technologist

Job Description

Medical radiation technologists are divided into four groups: radiological technologists, nuclear medicine technologists, radiation therapists and medical resonance imaging technologists.

Radiological technologists:

- Operate X-ray, radiographic and fluoroscopic equipment, computerized tomography (CT) scanners, mammography units, and magnetic resonance imaging (MRI)
- Prepare patients and provide appropriate care including radiation protection measures for medical tests
- Perform basic verification and quality control checks on radiographic and film processing equipment
- May train and supervise students or other radiological technologists

Nuclear medicine technologists:

- Provide information about testing to patients
- Provide appropriate care for the patient during the examination
- Decide which radioactive material to use and calculate the dose
- Prepare the solution and inject it into the patient's bloodstream
- Take images as the chemicals pass through the patient's body
- Record and process results of procedures and provide images to the doctor
- May train and supervise students or other nuclear medicine technologists.

Radiation therapists:

- Work with doctors to develop a treatment plan
- Position patients for treatment and operate radiation machines
- Monitor patients on closed-circuit televisions
- Prepare applicators containing radioactive material for doctors to administer
- Provide information and support to patients, and check them for side effects
- May train and supervise students or other radiotherapy technologists.

Medical Resonance Imaging (MRI) Technologists:

- MRI techs operate machines that use radio waves
- Responsible for patient care, quality control of the equipment, and ensuring the safety of all individuals entering the MRI environment.
- May train and supervise students or other MRI technologists.
- May be involved in clinical trials for research.

Source: **Career Cruising** database (Profiles for "Medical Imaging Tech," "Nuclear Medicine Technologist" & "Radiation Therapist"). Available from the VPL Digital Library | Explore our Digital Library page <http://www.vpl.ca/digital-library/career-cruising/>

Source: **NOC**, <http://www5.hrsdc.gc.ca/noc/english/noc/2011/Profile.aspx?val=3&val1=3215>

Source: **WorkBC** Career Profiles, <http://www.workbc.ca/Careers/> [search 3215]

Industry Overview

Industry sources report that there are currently shortages for medical radiation technologists throughout the Lower Mainland.

The growing demand for health-care services will increase opportunities for medical radiation technologists. Population growth, an aging population, and technological advances in diagnosis and treatment are contributing to the demand for X-rays, CT, MRI, nuclear medicine tests and other diagnostic procedures.

Those seeking employment in hospital settings are advised that full-time positions are difficult to acquire when starting a career; however, there will be plenty of on-call and part-time opportunities.

Job Outlook in BC



Chart from WorkBC

The BC Regional Employment Projections, 2010-2015, provides job openings projections for medical radiation technologists (NOC 3215) within BC regions:

Region	2010 Estimated Employment	2015 Estimated Employment	Avg Annual % Change, 5 Yrs, 2010 to 2015
Vancouver Island / Coast	560	630	2.4%
Lower Mainland / Southwest	1,280	1,430	2.2%
Thompson-Okanagan	290	320	2.2%
Kootenay	80	90	3.2%
Cariboo	80	100	3.8%
North Coast & Nechako	50	60	3.0%
Northeast	30	40	3.8%

Source: Regional Employment Projections, BC Stats. Projections for development regions.
<http://www.bcstats.gov.bc.ca/StatisticsBySubject/LabourIncome/EmploymentUnemployment/RegionalEmploymentProjections.aspx> [accessed October 2014]

You can learn more about working in BC from the following source:

- **WorkBC Career Profiles** [search Medical Radiation Technologists OR 3215]
<http://www.workbc.ca/Careers/>

Types of Employers

Medical radiation technologists are employed in hospitals, cancer treatment centres, clinics, radiological laboratories, research and education facilities, and in equipment sales and service and training.

Salary

In BC, the *average salary for **medical imaging technologists*** is between \$66,000 and \$95,000 a year.

Nuclear medicine technologists earn anywhere from \$45,000 to \$90,000 a year. The average income is between \$58,000 and \$68,000 a year.

Radiation therapists can earn anywhere from about \$50,000 to more than \$100,000 a year. The national average salary for radiation therapists is between \$60,000 and \$75,000 a year.

In addition to their salaries, full-time employees usually receive benefits, including paid sick leave and vacation time, and dental coverage. Technicians often belong to unions. This means that their wage rate and benefits are negotiated on their behalf by union representatives.

Source: *Career Cruising* database (Profiles for "Medical Imaging Tech," "Nuclear Medicine Technologist" & "Radiation Therapist").

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In BC regions, **medical radiation technologists** can expect to make:

Location	Wage (\$/hr)		
	Low	Median	High
British Columbia	30.00	34.00	40.00
Lower Mainland - Southwest Region	30.00	34.00	40.00
Thompson--Okanagan Region	30.00	34.00	40.00
Vancouver Island and Coast Region	30.00	34.00	40.00

Source: Job Bank Canada <http://www.jobbank.gc.ca/>

Working Hours

Medical radiation technologists typically work 37 to 40 hours per week. For those working in hospitals shift work, evenings and weekends is common. They can often expect to be on call in case of an emergency. Opportunities for part-time work are also available.

Source: WorkBC Career Profiles [search 3215]

2. Skills, Education and Experience

Skills

- extremely detail oriented
- ability to work effectively as part of a team
- excellent communication skills (to both co-workers and patients)
- ability to work compassionately with patients who have acute illnesses
- good physical stamina
- interest in science and technology

Source: <http://www.workbc.ca/Job-Seekers/Career-Profiles/3215>

Education and Experience

- Completion of a two- to three-year college, hospital or other approved program in diagnostic radiography or magnetic resonance imaging (for radiological technologists and magnetic resonance technologists), nuclear medicine technology (for nuclear medicine technologists) or radiation therapy (for radiation therapists)
- Some workers may have a bachelor of health sciences degree in radiography, nuclear medicine or radiation therapy.
- A period of supervised practical training is usually required.

Qualifications

This occupation is not regulated in British Columbia.

Although this occupation is non-regulated in British Columbia, employers generally require certification and registration with the Canadian Association of Medical Radiation Technologists (CAMRT) and/or British Columbia Association of Medical Radiation Technologists (BCAMRT).

To attain full-practice membership or registration in the profession, you must write and pass the Canadian Association of Medical Radiation Technologists (CAMRT)

- CAMRT certification exam information at <http://www.camrt.ca/>

You may then register with the provincial association, the British Columbia Association of Medical Radiation Technologists (BCAMRT) which also allows you to obtain membership in the national CAMRT.

- BCAMRT registration information at <http://www.bcamrt.bc.ca/>

International Applicants

Internationally Educated Medical Radiation Technologists must apply for an assessment of their education credentials, language fluency and work experience through Canadian Association of Medical Radiation Technologists (CAMRT) before they can apply to write the certification exam.

Further information can be found at:

- ***Internationally Educated Medical Radiation Technologists***
<http://www.camrt.ca/certification/international/>
- ***CAMRT Self Assessment tools for IEMRTs:***
<http://www.camrt.ca/certification/international/readinessselfassessmenttoolsforiemrts/>

3. Finding Jobs

You'll find job advertisements in local newspapers and electronic sources, as well as through professional associations' publications.

Local Newspapers

You can look at the *Vancouver Sun & The Province* at Vancouver Public Library for free. Check the job postings daily, the careers section in the *Vancouver Sun* on Wednesdays and Saturdays and, in *The Province* on Sundays.

Job White Pages

- Available in print at the Central Library or online at <http://www.vpl.ca/digital-library/jobfreewaycom>
Available from the VPL Digital Library | Explore our Digital Library page
Access at VPL locations only

Online Job Postings

- **BC's Provincial Health Authorities**
 - **Vancouver Coastal Health Authority**
<http://www.vch.ca/careers/>
 - **Fraser Health Authority**
<http://careers.fraserhealth.ca/>
 - **Interior Health Authority**
<http://www.interiorhealth.ca/sites/Careers/Pages/default.aspx>
 - **Northern Health Authority**
<http://careers.northernhealth.ca/>
 - **Provincial Health Services Authority (PHSA)**
<http://www.phsa.ca/Careers/default.htm>
 - **Vancouver Island Health Authority**
<http://www.viha.ca/careers/>
- **Indeed.com**
http://ca.indeed.com/advanced_search
Find jobs posted on a multitude of company career sites and job boards.

Professional Associations' Career Resources

- **Canadian Association of Medical Radiation Technologists (CAMRT)**
<http://www.camrt.ca/membership/membershipgettheadvantage/>
You must be a member of CAMRT to access career ads

- **British Columbia Association of Medical Radiation Technologists (BCAMRT)**
<https://www.bcamrt.bc.ca/careers/job-postings/>
Job postings available to BCAMRT members only

Identifying the Right Position

When you browse job advertisements, you'll find a range of different job titles that are relevant.

For medical radiation technologists, look for these related job titles (NOC 3215):

- CT technologist
- magnetic resonance imaging (MRI) technologist
- mammography technician
- nuclear medicine technologist
- radiation therapist
- radiography technologist
- radiotherapy technician

Source: NOC, <http://www5.hrsdc.gc.ca/noc/english/noc/2011/Profile.aspx?val=1&val1=3215>

Creating a List of Potential Employers

You can use directories to produce lists of hospitals, clinics, and laboratories in Vancouver or the Lower Mainland. Contact them directly to find out if they're hiring.

- **Canadian Medical Directory**

This directory includes a list of all Canadian hospitals. Available at the Central Library, 610.92 C21

- **Directory of Canadian Healthcare Personnel**

This directory includes a list of medical labs and clinics across Canada. Available at the Central Library, 362.11025 C21a

- **Reference Canada**

<http://www.vpl.ca/digital-library/reference-canada>

Click on "Start Search" beside Canadian Businesses, then select the "Advanced Search" button. Select both "Keyword/SIC/NAICS" under Business Type and "City" under Geography. In the top search box enter "laboratories" and click SEARCH. Select the appropriate headings. Lower down, select the Province, choose the cities, and click the "View Results" button.

Available from the VPL Digital Library | Explore our Digital Library page

NOTE: *You can access this database from a Library computer. If you are using a computer from outside the Library, you will need a Vancouver Public Library card to login to this database. After clicking on the database name, you will be asked to enter your library card number and PIN (usually last four digits of your telephone number).*

4. Applying for a Job

In Canada, employers usually expect to receive a resume (curriculum vitae) and a cover letter that identifies the position you are applying for and summarizes your relevant experience.

Use the library catalogue, <http://vpl.bibliocommons.com/> to find books on writing resumes and cover letters specific to your industry.

To learn about applying for jobs in Canada, use the following pathfinders which are available in print at the Central Library or online at <http://skilledimmigrants.vpl.ca/>.

- **Writing Resumes and Cover Letters**

Go to <http://skilledimmigrants.vpl.ca>

[Search Writing Resumes and Cover Letters]

- **Getting Canadian Work Experience**

Go to <http://skilledimmigrants.vpl.ca>

[Search Getting Canadian Work Experience]

- **Networking for Employment**

Go to <http://skilledimmigrants.vpl.ca>

[Search Networking for Employment]

- **Learn More About Working in BC and Canada**

Go to <http://skilledimmigrants.vpl.ca>

[Search Learn More About Working in BC and Canada]

5. Getting Help from Industry Sources

Industry Associations

Medical radiation technologist associations in BC and Canada provide assistance and information on training and certification. Registration and fees are required for membership.

- **BC Association of Medical Radiation Technologists (BCAMRT)**
<http://www.bcamrt.bc.ca/>
- **Canadian Association of Medical Radiation Technologists**
<http://www.camrt.ca/>

Industry Journals

Search the Vancouver Public Library catalogue for journals related to your profession. Examples at the Central Library:

- **Journal of Medical Imaging and Radiation Sciences**
<http://www.jmirs.org/>

Questions? Please ask the Information Staff in the Central Library, Vancouver Public Library or telephone 604-331-3603.

Please note that the information in this guide is also available online through the Skilled Immigrant InfoCentre website at <http://skilledimmigrants.vpl.ca/>.