

Radiation Oncologist

The cancer doctor who treats tumours with radiation beams. Five years of residency after medical school, a salaried job at a cancer centre, and physics every day.

TYPICAL PAY

\$380,000

a year, full time

PAY RANGE

\$250k to \$550k

starting to experienced

TIME TO QUALIFY

11 to 13 years

after high school

DEMAND

Good

job outlook

LICENCE NEEDED

Yes

regulated job

WHERE YOU WORK

Regional cancer centres, teaching hospitals, a few private clinics

How you get there

- 1 High school** Grades 11 and 12
Top marks in biology, chemistry, physics, math and English. You need a very high average for a science undergrad.
- 2 Bachelor's degree** 3 to 4 years
Any major works. Keep a GPA (grade point average) above 3.8, volunteer, do research. Write the MCAT (medical school admission test).
- 3 Medical school, the MD (doctor of medicine)** 3 to 4 years
Acceptance rates are 5% to 15%. Classes, then clinical rotations. Do an oncology elective and find a research project.
- 4 Radiation oncology residency** 5 years
Matched straight from medical school through CaRMS (the residency matching service). Cancer clinics, treatment planning, formal courses in radiation physics and radiobiology, and rotations in medical oncology, surgery and palliative care.
- 5 Certification and licence** End of residency
Pass the Royal College exam to become FRCPC (Fellow of the Royal College of Physicians of Canada), then register with your provincial College of Physicians and Surgeons. Many add a 1-year fellowship.

Pros and cons

- + Regular hours and very few emergencies
- + Salaried, stable, no office to run
- + You cure many cancers and ease pain in others
- About 12 years of training and six figures of debt
- Jobs exist only where there is a cancer centre, mostly cities
- Every day includes hard conversations

Good to know

Radiation works by breaking DNA

The Canadian Cancer Society explains it simply: radiation damages a cancer cell's DNA so it stops dividing. Normal cells nearby get hit too, but they are better at repairing themselves, which is why treatment i...

It takes a team of five

A radiation oncologist decides the treatment, a medical physicist checks the machine and the plan, a dosimetrist calculates the dose, a radiation therapist runs the machine, and a nurse looks after the pati...

Optional boosts

Brachytherapy. Stereotactic radiosurgery. Pediatric radiation oncology. Clinical trials.

Where these numbers come from

Job Bank: Radiation oncologist, wages (updated Nov 2025)
Canadian Association of Radiation Oncology
Royal College of Physicians and Surgeons of Canada
CIHI: A profile of physicians in Canada, 2024 (payments)

Numbers checked September 2026. Pay figures are typical full-time annual amounts in Canadian dollars, based on Government of Canada Job Bank wage data and published salary grids. They vary by province, employer and experience. Tuition is for domestic students. Sources, links and the click-through version: <https://career.help/ca/careers/radiation-oncologist>



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