



Becoming a Radiation Protection Professional Webinar Q&A

These are questions we did not get the opportunity to answer during the webinar. Please note, the answers below are based on our readings and experience and are not legal or medical advice.

Q: I live in _____. Is there any organization like the Canadian Radiation Protection Association (CRPA) in my country?

A: If you live in the United States, the [Health Physics Society](#) (HPS) is the primary professional organization for radiation protection and holds a unique historical position as the world's first radiation protection society, founded in 1956, with enduring national and international influence. HPS accepts members from around the world, and many members of CRPA are also members of HPS. Internationally, the [International Radiation Protection Association](#) (IRPA) provides a global umbrella for national radiation protection societies, bringing together organizations such as HPS and CRPA. You can check the IRPA website to see which member organization represents your country, and if there is no national society, many associations welcome international members.

Q: NRCan does not certify Certified Exposure Device Operators (CEDOs), they only take care of testing. CEDOs are certified by the Canadian Nuclear Safety Commission (CNSC). (Not a question, but rather a comment that was addressed during the webinar, but should be noted. The slides have been adjusted to correct for this.)

A: This was poor phrasing on our part in attempt to be brief. Section 25(c) of the Nuclear Substance and Radiation Devices Regulations state, "the Commission or a designated officer authorized under paragraph 37(2)(b) of the Act may certify a person as an exposure device operator after receiving an application that includes the following information:

- **(a)** the person's name and business address;
- **(b)** the person's training and experience; and
- **(c)** evidence of the successful completion by the person of an examination recognized by the Commission."

National Resources Canada (NRCan) acts as the body that administers the written examination that is part of the CEDO certification process through its National Non-Destructive Testing Certification Body (NDTCB).

Q: The CRSP is included in the list of professional fields as well as CIH, why CSP is not included in this list?

A: The list was intended as a set of examples of professional certifications in the industrial hygiene and occupational health and safety space and was not meant to be exhaustive. It was developed based on the professional organizations for which participants in our radiation safety officer (RSO) and X-ray safety officer (XSO) courses have requested continuing education credit letters. In some cases, participants do not specify an organization and simply request a generic confirmation letter.

Q: What is the main differences between RPO and RPE?

A: These terms have specific meanings within the European Union regulatory framework. In particular, definitions 73 and 74 of [Council Directive 2013/59/Euratom](#) define Radiation Protection Officer and Radiation Protection Expert. How these roles are applied, designated, or regulated in practice is determined by individual EU member states.

As explained in the webinar, within Canada the Radiation Protection Officer (RPO) is a prescribed job role in Ontario for the use of X-rays under 1 MeV in human health care. Radiation Protection Expert is not a prescribed role in any jurisdiction in Canada. As our expertise is within the Canadian regulatory context, we are not able to interpret or comment on how these definitions are implemented in Europe.

Q: Are international candidates considered for RSO positions in Canada? If yes, what are the requirements?

Is there any opportunity for postdoc or research scientist after PHD?

A: Yes. International candidates may be considered for RSO/research positions in Canada, but hiring decisions are made by individual employers. An employer must have an open position and be willing to support the candidate's work authorization or immigration status. General information on working and settling in Canada is available from Immigration, Refugees and Citizenship Canada: <https://www.canada.ca/en/immigration-refugees-citizenship/services/settle-canada.html>

Q: I am just a student who is just in his final year in BSc physics. What do you advise, especially for one in Africa?

A: I would suggest starting by looking at the member societies of the International Radiation Protection Association ([IRPA](#)) to see whether there is a radiation protection society in your country or region. You can reach out to that society directly to ask about recommended education pathways, early-career opportunities, and next steps within your local regulatory context.

Q: Is there MSc available with your organization?

Is there online study for scholarship?

Is there any hiring going on in co-op program for students?

A: The Canadian Radiation Protection Association (CRPA) is a professional society for radiation protection professionals. While the CRPA offers professional development courses and learning opportunities for both members and the public, it is not an accredited university or college and does not grant academic credentials such as an MSc. Questions about online study options, admissions, scholarships, co-op placements, or hiring must be directed to the individual educational institutions that award academic credit. To help with this, the CRPA maintains a list of radiation protection education and training programs in Canada, which includes colleges and universities offering accredited programs. This list can be found here: <https://crpa-acrp.ca/resources/radiation-protection-programs-in-canada/>

Q: I have BSc in Physics, some short training certification on radiation from IAEA and used to work conducting assessment and quality assurance on X-ray and CT-Scan, but not in Canada. How can I align with Canada's requirements?

A: Canada does not have a single national qualification pathway for X-ray radiation protection. Regulation of X-ray use is handled by 14 separate jurisdictions: the provinces and territories. Each jurisdiction sets

its own requirements for roles such as Radiation Safety Officer or related positions, depending on the type of facility and equipment.

To align your background with Canadian requirements, you would need to identify the province or territory where you wish to work and review that jurisdiction's specific regulatory and credential expectations. Employers and regulators will typically assess how your education, training, and practical experience compare to local requirements and may require additional Canadian-specific training or demonstrated familiarity with provincial legislation and standards.

In some cases, Canadian-focused training, such as the Radiation Safety Institute of Canada's [X-ray Safety Officer](#) (XSO) course, may help build familiarity with Canadian regulatory frameworks and expectations, although it does not replace jurisdiction-specific requirements.

- Q: I have a PhD in radiation physics and have published research on radiation shielding. What opportunities are available for postdoctoral positions, and what steps are typically required to secure one?
- A: Postdoctoral positions in radiation physics are typically offered through universities, research hospitals, national laboratories, or government research organizations rather than professional societies. Opportunities are usually advertised by individual institutions and are often tied to specific funded research projects.

Securing a postdoctoral position generally involves identifying researchers or research groups working in your area of expertise, monitoring institutional job postings, and contacting potential supervisors directly with a focused expression of interest, curriculum vitae, and research statement. Requirements and processes vary by institution and country.

In Canada, please refer to the CRPA's list of Post-Secondary RP Programs & Courses in Canada: <https://crpa-acrp.ca/resources/radiation-protection-programs-in-canada/>.

Q: I have developed a prototype radiation dosimetry system that performs approximately 100 times faster than existing commercial systems. How can I engage with industry or connect with companies that may be interested in developing or commercializing this technology?

A: One way to connect with companies and organizations in the radiation protection field in Canada is through the Canadian Radiation Protection Association (CRPA). The CRPA Corporate Member Business Directory lists many companies involved in consulting, equipment, training, and services related to radiation protection and safety, including the Radiation Safety Institute of Canada and others you may want to contact about industry partnerships or interest in your technology. You can find the directory here: <https://crpa-acrp.ca/resources/corporate-member-business-directory/>

Another useful resource is the Canadian Nuclear Safety Commission's list of nuclear substances and radiation devices service providers. This list includes organizations that provide training, program development, and other services to licensed users of radiation devices in Canada. You can use it to identify additional potential industry contacts: <https://www.cnsccsn.gc.ca/eng/nuclear-substances/licensing-nuclear-substances-and-radiation-devices/service-providers/>

We do not provide advice on venture capital or investment pathways, but these directories can help you identify relevant Canadian companies and service providers in the field.

Q: How are AI technologies involved in radiation safety industry? Any suggestions on that direction?

A: Artificial intelligence technologies are being explored in the radiation safety field as tools to support data analysis, pattern recognition, and trend identification in areas such as dosimetry, area monitoring, equipment performance, and quality assurance. AI might be used to augment professional judgement, helping organizations manage large datasets and identify potential issues earlier. For further reading, a peer-reviewed article on this topic is available here: <https://www.radioprotection.org/articles/radiopro/pdf/2022/02/radiopro210054.pdf>. The International Atomic Energy Agency also has a recorded webinar focused on applications of AI specific to patient radiation protection: <https://www.iaea.org/resources/webinar/artificial-intelligence-in-radiation-protection-of-patients-ai-technology>.

Anyone interested in this direction should focus on building a strong foundation in radiation protection principles, data literacy, and regulatory requirements, and then explore how emerging analytical tools can be applied responsibly within existing safety and compliance frameworks.