



PLEASE NOTE

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For more information concerning the history of these regulations, please see the [Table of Regulations](#).

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CHAPTER P-30

PUBLIC HEALTH ACT

RADIATION SAFETY REGULATIONS

Pursuant to section 23 of the *Public Health Act* R.S.P.E.I. 1988, Cap. P-30 Council made the following regulations:

1. In these regulations

Definitions

- | | |
|--|--------------------------------------|
| (a) “combined technician” means a person who has completed an approved course in x-ray and laboratory procedures; | combined technician |
| (b) “Department” means the Department of Health; | Department |
| (c) “dose” means the quantity of energy absorbed per unit mass by any material from ionizing radiation or from secondary particles generated by radiation falling upon or penetrating the materials; | dose |
| (d) “medical officer” means a physician licensed to practise on Prince Edward Island who is appointed by the Minister to deal with all medical problems associated with exposure to radiation; | medical officer |
| (e) “Minister” means the Minister of Health; | Minister |
| (f) “mobile radiation equipment” means transportable equipment designed to be moved from one location to another, between periods of use, on its own wheels or similar means of support; | mobile radiation equipment |
| (g) “owner” means a person, organization or institution having title to or administrative control over one or more radiation emitting devices; | owner |
| (h) “radiation” means energy in the form of
(i) electromagnetic energy having frequencies greater than ten megacycles per second, and
(ii) ultrasonic energy having frequencies greater than twenty kilocycles per second; | radiation |
| (i) “radiation emitting device” means any stationary or mobile equipment capable of emitting radiation but does not include:
(i) any radioactive substance, or
(ii) equipment operated under five kilovolts and not designed principally to produce radiation; | radiation emitting device |
| (j) “radiation equipment” or “x-ray machine” means an operable device, the principal purpose and function of which is the production | radiation equipment or x-ray machine |

	of x-rays, together with such ancillary apparatus as may be necessary for this purpose;
Radiation Safety Officer	(k) "Radiation Safety Officer" means a person appointed by the Minister for the purposes of these regulations;
radiation student	(l) "radiation student" means a person who is exposed routinely to radiation in the course of his educational activities;
radiation worker	(m) "radiation worker" means a person who, in the course of his work, business or occupation, may receive a dose of radiation in excess of the maximum permitted non-medical exposure for members of the general public;
shield	(n) "shield" means a material barrier interposed in the path of a flow of x-ray and having the effect of reducing the dose or dose rate experienced by an object located beyond the shield;
stationary radiation installation	(o) "stationary radiation installation" means equipment that is permanently installed in one location;
x-ray	(p) "x-ray" means artificially produced electromagnetic radiation generated by electrons having the kinetic energy 5 keV or more;
x-ray license	(q) "x-ray license" means a license issued by the Department sanctioning the operation of x-ray equipment. (EC547/84; 621/05)
Application	2. These regulations do not apply to (a) any radioactive source or substance that is licensable under the <i>Atomic Energy Control Act</i> (Canada) R.S.C. 1985, Chap. A-16; or (b) any radiation emitting device that is licensed and categorized as industrial gauging under the <i>Atomic Energy Control Act</i> and Regulations (Canada). (EC547/84)
Registration of radiation equipment	3. (1) No person shall install or permit the installation of a new, used or modified radiation emitting device in any place until the owner of the device has forwarded a completed application form for ownership registration of radiation equipment (Schedule 1) to the Department.
Inspection	(2) Prior to registration of a radiation emitting device, the device and the radiation installation in which it is to be installed, shall be inspected by a Radiation Safety Officer.
Use	(3) No person shall use or permit the use of any radiation emitting device unless such device has been registered pursuant to these regulations and such registration is in force and has not been cancelled or suspended.

(4) When the person who is registered as the owner of any radiation emitting device ceases to be the owner thereof, he shall notify the Minister within thirty days thereof, and shall furnish such particulars relating to change of ownership or disposition of the device as the Minister shall require.

Change of
ownership

(5) Where any radiation emitting device has been leased to a person, the lessee shall notify the Minister within thirty days of the date when he ceases to be the lessee thereof and give such particulars relating to the device as the Minister shall require. (EC547/84)

Lease

4. No radiation emitting device shall be operated on Prince Edward Island unless it satisfies the Radiation Emitting Devices Regulations for new devices of the same class, as included in Safety Codes 20-A, 7, 21, and 22 or other Safety Codes subsequently published by Health and Welfare Canada. (EC547/84)

Standards

5. Every radiation installation and every radiation emitting device whether stationary or mobile shall be constructed and installed in conformity with installation requirements of Safety Code 20-A, R.P.B., Appendix III-B, and operated so that no person shall be exposed to radiation in excess of the limits as defined in Schedule II attached to and forming part of these regulations. (EC547/84)

Installation
requirements

6. After having or obtaining registration of a stationary radiation installation, an owner shall not

Approval of
modifications etc.

- (a) install or cause to be installed any different radiation emitting device;
 - (b) install or cause to be installed additional radiation emitting devices;
 - (c) make or cause substantial modifications to the equipment; or
 - (d) make or cause substantial alterations to the location of equipment
- without first obtaining prior approval of the Minister. (EC547/84)

7. (1) Any owner who brings a radiation emitting device into the province on a temporary basis must ensure that the device is registered in another province.

Temporary use

(2) If the device is located in Prince Edward Island for more than thirty days, the owner must notify the Radiation Safety Officer who will then inspect the device. (EC547/84)

Inspection

8. (1) No person shall use a radiation emitting device for the irradiation of human subjects unless that person

Operator
qualifications

- (a) is a licensed physician on Prince Edward Island and certified by the Royal College of Physicians and Surgeons of Canada in Diagnostic or Therapeutic Radiology, or is eligible to write the

Royal College examinations, or is a resident in training under supervision of a certified radiologist;

(b) is an active member of the Canadian Association of Medical Radiation Technologists (CAMRT) or is certificate eligible;

(c) is undergoing a course of instruction in a school approved by the Canadian Association of Medical Radiation Technologists and the Canadian Medical Association;

(d) is providing coverage in small hospitals, has taken an approved course in combined x-ray and laboratory procedures, and shall have received a certificate of competency in the use of radiation emitting devices as issued by or acceptable to the Department, the Prince Edward Island Association of Medical Radiation Technologists and the Canadian Society of Laboratory Technologists, Prince Edward Island Branch;

(e) is registered in the province as a dentist, or is a person acting under the supervision of a registered dentist, or an instructor approved to teach the dental assistant student; or

(f) is registered in the province as a chiropractor.

Transitional,
combined
technician

(2) Notwithstanding subsection (1), no person who is presently working as a combined technician and is an associate member of the Prince Edward Island Association of Medical Radiation Technologists will be deprived of work, changed in position, or required to retrain due to these regulations.

Transitional, non-
certified radiologist

(3) Notwithstanding subsection (1), no person who is presently working as a noncertified radiologist will be deprived of work, changed in position, or required to retrain due to these regulations. (EC547/84)

Qualifications for
use on non-human
subjects

9. No person shall use or prescribe the use of a radiation installation or any radiation emitting device for the irradiation of other than human subjects unless that person

(a) is registered in the province as a veterinarian;

(b) is certified as a senior industrial radiographer or junior radiographer in accordance with the current standards for certification of industrial radiographer personnel issued by the Canadian Government Specification Board;

(c) is a person acting under the direct supervision of a person referred to in clause (a), (b) or (d), is over sixteen years of age and is a radiation student undergoing a *bona fide* course in a radiation installation relating to the operation of radiation equipment under safety supervision satisfactory to the Minister;

(d) is a service man, physicist, or Radiation Safety Officer who may perform necessary repairs, replace parts, and do required testing on the equipment to insure proper maintenance and safety; or

(e) is authorized by the Minister to operate the equipment.
(EC547/84)

10. (1) An owner shall not employ as a radiation worker any person
(a) who is under eighteen years of age; or
(b) who has been found by a medical authority to be unfit for such employment.

Radiation worker
qualifications

(2) Clause 1(a) does not apply to a person employed as a radiation technologist in training. (EC547/84)

Exception

11. (1) A radiation worker, radiation technologist or radiation student who knows that she is pregnant, shall report that fact to her employer or the person in charge of her training.

Pregnancy

(2) If the pregnant person desires to continue in employment or training, the employer together with the pregnant person will assess and revise as indicated the employment duties or training activities to ensure the maximum permissible dose for a pregnant person is not exceeded. If reassignment is not possible, then the pregnant employee, if she wishes to continue working, will acknowledge in writing that she has been informed by a radiologist of the risks involved and has accordingly accepted those risks.

Idem

(3) No woman shall be denied employment by virtue of the fact that she is pregnant unless there is evidence that she has exceeded the maximum permissible dose for a pregnant person. (EC547/84)

Idem

12. Nothing in these regulations limits the kind or quantity of radiation that may be deemed necessary for diagnostic or therapeutic purposes by or under the direction of a person qualified to provide patients with care and treatment by means of radiation. (EC547/84)

Use for diagnostic
or therapeutic
purposes

13. (1) Before any examination using radiation equipment is undertaken there shall be

Procedure

- (a) a clear-cut clinical indication that such an examination is necessary; and
- (b) inquiries made as to previous radiological examinations, the records of which may render such examination unnecessary.

(2) Radiation exposure to patients is to be as low as reasonably possible consistent with the established diagnostic procedures.

Exposure

(3) Mobile radiation equipment shall be used only for examination where it is impractical to transfer the patient to a stationary radiation installation.

Mobile equipment

Shielding	(4) Proper gonadal shielding shall be used for all examinations except those where it would obstruct the field of interest.
Pregnancy inquiries	(5) Radiographs and nuclear medicine diagnostic tests shall not be ordered on women in the reproductive age group unless the referring physician is satisfied that there is no reasonable possibility of her being pregnant or that she has passed the sixteenth week since conception.
Shielding, pregnant patient	(6) If the medical condition of a woman referred to in subsection (5) is such that she requires immediate radiological diagnosis regardless of her reproductive status, every effort shall be made to protect the reproductive organs by shielding and collimation if they are not in the area of interest.
Records	(7) Information regarding a woman's condition pursuant to subsections (5) and (6) shall be noted on the requisition before the examination is done and shall be kept on file with the patient's records. (EC547/84)
Responsibilities of owner, inspection and testing	14. An owner shall (a) permit a Radiation Safety Officer to enter at any reasonable time the place where the radiation emitting device is used; (b) furnish such information as the Radiation Safety Officer may request concerning (i) the extent and manner of use of the radiation emitting device, (ii) the qualifications and training of the person using and operating the radiation emitting device or directing its operation, (iii) the protective procedures that have been established, or (iv) the circumstances surrounding any incident which might have involved an undue exposure of any person; and (c) permit the Radiation Safety Officer to make whatever technical tests are necessary in order to establish an estimate of the dose that a person in the vicinity of the radiation emitting device may receive or may have received. (EC547/84)
Quality Assurance Program	15. (1) An owner shall permit the Radiation Safety Officer to implement a Quality Assurance Program of tests and procedures for X-ray equipment that is designed to ensure that the facility produces consistently high quality images with minimum radiation exposure to patients, and is consistent with the system set out in Safety Code 20-A of Health & Welfare Canada.
<i>Idem</i>	(2) The Quality Assurance Program shall include procedures and tests designed to evaluate the consistency of (a) image quality, (b) film processing, (c) darkroom conditions, (d) image receptors,

- (e) x-ray machine parameters including repeatability K.V.P., x-ray beam quality and collimator characteristics; and
- (f) patient exposure and exposure rate.

(3) Every Radiation Safety Officer shall ensure that records are maintained that specify Test records

- (a) the type, frequency and results of tests performed on x-ray machines and equipment; and
- (b) the action taken to correct any deficiencies identified by the tests.

(4) The records referred to in subsection (3) shall be maintained in each facility in which x-ray machines are operated and shall be furnished to the Minister upon his request. (EC547/84) Idem

16. (1) An owner shall permit a medical officer to interview radiation workers to facilitate the review of radiation records pertaining to those workers including dosimetry records received from the National Dose Registry, R.P.B. Records concerning radiation workers

(2) If so directed by the Minister, the owner of a radiation emitting device shall arrange for the medical examination of any person operating the equipment. Medical examination

(3) The costs of examinations done pursuant to subsection (2) shall be borne by the owner and all reports shall be made available to the Minister. (EC547/84) Costs

17. (1) The owner of a radiation emitting device shall Responsibilities of owner, warnings

- (a) post in an obvious place placards supplied by the Department on which there appears an abstract of this regulation or applicable part thereof;
- (b) post radiation warning signs or install warning devices prescribed by the Department; and
- (c) when so directed by the Department discontinue the use of the radiation emitting device until such changes have been made respecting it or its manner of operation as the Department may direct.

(2) Directions from the Department to the owner of a radiation emitting device shall be in writing and specify the time within which compliance shall be effected. (EC547/84) Directions

18. When laser beams are used for medical purposes Laser beams

- (a) the design and manufacture of such shall be in accordance with the requirements of the *Radiation Emitting Devices Act* (Canada) R.S.C. 1985, Chap. R-1;

- (b) the operation and use of such shall be in accordance with the requirements of the Minister; and
- (c) warning signs indicating “Laser Beam in Use” shall be posted in areas where laser beams are in use. (EC547/84)

Fees

19. The owner shall pay a fee each time an inspection is completed pursuant to these regulations and at the rate established by the Minister. (EC547/84)

Offences and
penalties

20. Any person who contravenes any provision of these regulations, any condition of a registration, or any order or direction made under these regulations is guilty of an offence and is liable on summary conviction to a fine of not less than fifty dollars nor more than three hundred dollars and in the case of a continuing offence to a further fine of not less than twenty-five dollars nor more than fifty dollars for each day during which the offence continues. (EC547/84)

SCHEDULE I**APPLICATION FOR OWNERSHIP REGISTRATION OF RADIATION
EQUIPMENT****DEPARTMENT OF HEALTH**

NAME OF OWNER OR INSTITUTION

ADDRESS..... TELEPHONE NUMBER

LOCATION OF DEVICE, IF DIFFERENT FROM ABOVE

TYPE OF DEVICE (CHECK APPROPRIATE - MAY CHECK MORE THAN ONE)

- ☐ General Radiography (Medical)
☐ Fluoroscopy (Medical)
☐ Mobile
☐ Special Procedures (Medical)
☐ Therapy
☐ Others (Specify)
☐ Dental
☐ Chiropractic
☐ Veterinarian
☐ Research (Medical or Other)
☐ Industrial (All Types Other Than A.E.C.B. Licensed)

PLEASE LIST EACH PIECE OF RADIATION EQUIPMENT:

(Use Additional Sheet if Necessary)

MAKE	MODEL AND SERIAL NUMBER

THE NUMBER OF RADIATION WORKERS EMPLOYED AT THIS LOCATION

THE OWNER MUST NOTIFY THE DEPARTMENT OF HEALTH OF ANY CHANGES
IN THE INFORMATION GIVEN HEREIN.

Dated At This Day Of, 20

SIGNATURE OF OWNER

Return Completed Form To:
 Department of Health
 P.O. Box 2000
 Charlottetown
 Prince Edward Island
 C1A 7N8

EC621/05

SCHEDULE II

For purposes of this Schedule

- (a) “dose equivalent” means the maximum dose that may be permitted to be received over a specified period of time in accordance with the current recommendations of the International Commission on Radiological Protection; and
- (b) “rem” means a unit of dose equivalent as defined and used in the Atomic Energy Regulations (Canada) and applicable as a unit of x-ray dose on the base that one rem equals one rad. The Systems International equivalent is the sievert, where one sievert equals one hundred rems.

MAXIMUM PERMISSIBLE DOSE EQUIVALENT (Whole Body)

	ANNUAL	AVERAGE WEEKLY
Radiation Workers	5 rem (50 mSv)	0.1 rem (1mSv)
Other Workers or Members of Public	0.5 rem (5 mSv)	0.01 rem (0.1 mSv)
Maximum Permissible Dose Throughout the Whole of Pregnancy	1.0 rem (10mSv) during pregnancy or 1.5 rem (15mSv) during the year of pregnancy	
Maximum Permissible Dose for the Lens of the Eye	15 rem (0.15 Sv) per year	