

641—42.5(136C) Training for external beam radiation therapy authorized users.

42.5(1) The registrant for any therapeutic radiation machine subject to rules 641—42.15(136C) and 641—42.16(136C) shall require the authorized user to be a physician who:

a. Is certified in:

- (1) Radiology or therapeutic radiology by the American Board of Radiology;
- (2) Radiation oncology by the American Osteopathic Board of Radiology;
- (3) Radiology, with specialization in radiotherapy, as a British “Fellow of the Faculty of Radiology” or “Fellow of the Royal College of Radiology”;

(4) Therapeutic radiology by the Canadian Royal College of Physicians and Surgeons; or

b. Is in the active practice of therapeutic radiology and has completed all of the following:

(1) 200 hours of instruction in basic radiation techniques applicable to the use of an external beam radiation therapy unit;

(2) 500 hours of supervised work experience;

(3) A minimum of three years of supervised clinical experience.

42.5(2) To satisfy the requirement for instruction in paragraphs 42.5(1)“*a*” and “*b*,” the classroom and laboratory training shall include all of the following:

a. Radiation physics and instrumentation;

b. Radiation protection;

c. Mathematics pertaining to the use and measurement of ionization radiation; and

d. Radiation biology.

42.5(3) To satisfy the requirement for supervised work experience in subparagraph 42.5(1)“*b*”(2), training shall be under the supervision of an authorized user and shall include all of the following:

a. Reviewing the full calibration measurements and periodic quality assurance checks;

b. Evaluating prepared treatment plans and calculation of treatment times/patient treatment settings;

c. Using administrative controls to prevent a reportable radiation incident as described in 641—subrule 37.13(3);

d. Implementing emergency procedures to be followed in the event of the abnormal operation of an external beam radiation therapy unit or console;

e. Checking and using radiation survey meters.

42.5(4) To satisfy the requirement for a period of supervised clinical experience, training shall include all of the following:

a. One year in a formal training program approved by the Residency Review Committee for Radiology of the Accreditation Council for Graduate Medical Education or the Committee on Postdoctoral Training of the American Osteopathic Association;

b. An additional two years of clinical experience in therapeutic radiology under the supervision of an authorized user. The supervised clinical experience shall include:

(1) Examining individuals and reviewing their case histories to determine their suitability for external beam radiation therapy treatment and any limitations/contraindications;

(2) Selecting proper dose and how it is to be administered;

(3) Calculating the external beam radiation therapy doses and collaborating with the authorized user in the review of patients’ progress as well as consideration of the need to modify originally prescribed doses or treatment plans as warranted by patients’ reaction to radiation;

(4) Postadministration follow-up and review of case histories.

42.5(5) Notwithstanding the requirements of this rule, the registrant for any therapeutic radiation machine subject to rules 641—42.15(136C) and 641—42.16(136C) may also submit the training of the prospective authorized user physician for department review.

42.5(6) A physician cannot act as an authorized user for any therapeutic radiation machine until such time as said physician’s training has been reviewed and approved by the registrant.

[ARC 0182D, IAB 4/1/26, effective 7/1/26]