

**Instructions**  
**Training and Experience – Medical Authorized User**

Section 1 & 2 – Name and License

Self-explanatory

Section 3 – Board Certification

Please attach a copy of the relevant medical specialty board certificate.

Sections 4, 5 & 6 – Classroom and Laboratory Training, Supervised Work Experience, and Supervised Clinical Experience

For applicants who are **NOT** board certified, this section must be **FULLY** completed (*every section must have a response from the applicant*). Please review the following regulations concerning training and experience:

• ***Unsealed Therapy, Written Directive Required, DHS 157.64(4):***

(b) Has completed 700 hours of certified training and experience, including a minimum of 200 hours of classroom and laboratory training, in basic radionuclide handling techniques applicable to the medical use of unsealed radioactive material requiring a written directive that includes **ALL THE FOLLOWING**:

1. Classroom and laboratory training in **ALL THE FOLLOWING AREAS**:

- a. Radiation physics and instrumentation.
- b. Radiation protection.
- c. Mathematics pertaining to the use and measurement of radioactivity.
- d. Chemistry of radioactive material for medical use.
- e. Radiation biology.

2. Work experience under the supervision of an authorized user who meets the requirements in this subsection or equivalent agreement state requirements. A supervising authorized user who meets the requirements of this paragraph shall also have experience under subd. 2. g. in administering dosages in the same dosage category or categories as the individual requesting authorized user status. The work experience shall involve **ALL OF THE FOLLOWING**:

- a. Ordering, receiving and unpacking radioactive materials safely and performing the related radiation surveys.
- b. Performing quality control procedures on instruments used to determine the activity of dosages, and performing checks for proper operation of survey meters.
- c. Calculating, measuring, and safely preparing patient or human research subject dosages.
- d. Using administrative controls to prevent a medical event involving the use of unsealed radioactive material.
- e. Using procedures to contain spilled radioactive material safely.
- f. Using proper decontamination procedures.
- g. Administering dosages of radioactive drugs to patients or human research subjects involving a minimum of 3 cases in each of the following categories for which the individual is requesting authorized user status: oral administration of less than or equal to 1.22 GBq (33 millicurie) of sodium iodide I-131 for which a written directive is required; oral

administration of greater than 1.22 GBq (33 millicuries) of sodium iodide I-131; parenteral administration of any beta emitter or a photon-emitting radionuclide with a photon energy less than 150 keV, for which a written directive is required; and/or parenteral administration of any other radionuclide for which a written directive is required. Experience with at least 3 cases of oral administration of greater than 1.22 GBq (33 millicuries) of I-131 also satisfies the requirement for experience with 3 cases of oral administration of less than or equal to 1.22 GBq (33 millicuries) of I-131.

- **Parenteral Administration of Unsealed Radioactive Material Requiring a Written Directive (Sm-153, Sr-89, Y-90) DHS 1574.64(7):**

(b) Is an authorized user under s. DHS 157.65 (8) or 157.67 (17), or equivalent agreement state requirements and who meets the requirements in par. (c) 1. and 2.

(c) Is certified by a medical specialty board whose certification process has been recognized by the department under s. DHS 157.65 (8) or 157.67 (17) or equivalent agreement state requirements; and who meets the following requirements:

1. Has successfully completed 80 hours of classroom and laboratory training, applicable to parenteral administrations, for which a written directive is required, of any beta emitter or any photon-emitting radionuclide with a photon energy less than 150 keV, and/or parenteral administration of any other radionuclide for which a written directive is required. The training shall include **ALL OF THE FOLLOWING:**

- a. Radiation physics and instrumentation.
- b. Radiation protection.
- c. Mathematics pertaining to the use and measurement of radioactivity.
- d. Chemistry of radioactive material for medical use.
- e. Radiation biology.

2. Has work experience with any beta emitter or any photon-emitting radionuclide with a photon energy less than 150 keV, and/or parenteral administration of any other radionuclide for which a written directive is required. This work experience shall be under the supervision of an authorized user with experience in parenteral administration under sub. (4) (b) 2. g., for which a written directive is required, and who meets the requirements in sub. (4) or this subsection, or equivalent agreement state requirements. The work experience shall involve **ALL THE FOLLOWING:**

- a. Ordering, receiving, and unpacking radioactive materials safely, and performing the related radiation surveys.
- b. Performing quality control procedures on instruments used to determine the activity of dosages, and performing checks for proper operation of survey meters.
- c. Calculating, measuring, and safely preparing patient or human research subject dosages.
- d. Using administrative controls to prevent a medical event involving the use of unsealed radioactive material.
- e. Using procedures to contain spilled radioactive material safely, and using proper decontamination procedures.
- f. Administering dosages to patients or human research subjects, that include at least 3 cases involving the parenteral administration, for which a written directive is required, of any beta emitter or any photon-emitting radionuclide with a photon energy less than 150 keV and/or at least 3 cases involving the parenteral administration of any other radionuclide, for which a written directive is required.

- **Manual Brachytherapy, DHS 157.65(8):**

(b) Has completed a structured educational program in basic radionuclide handling techniques applicable to the use of manual brachytherapy sources that includes **ALL OF THE FOLLOWING:**

1. Two hundred hours of classroom and laboratory training in all of the following areas:
  - a. Radiation physics and instrumentation.
  - b. Radiation protection.
  - c. Mathematics pertaining to the use and measurement of radioactivity.
  - d. Radiation biology.
2. Five hundred hours of work experience, under the supervision of an authorized user who meets the requirements in this subsection or equivalent agreement state requirements at a medical institution, involving **ALL OF THE FOLLOWING:**
  - a. Ordering, receiving and unpacking radioactive materials safely and performing the related radiation surveys.
  - b. Checking survey meters for proper operation.
  - c. Preparing, implanting and removing brachytherapy sources.
  - d. Maintaining running inventories of material on hand.
  - e. Using administrative controls to prevent a medical event involving the use of radioactive material.
  - f. Using emergency procedures to control radioactive material.
3. Three years of supervised clinical experience in radiation oncology, under an authorized user who meets the requirements in this subsection or equivalent agreement state requirements, as part of a formal training program approved by the residency review committee for radiation oncology of the accreditation council for graduate medical education or the royal college of physicians and surgeons of Canada or the committee on postdoctoral training of the American osteopathic association. The experience may be obtained concurrently with the supervised work experience required by subd. 2.

- **Photon-Emitting Remote Afterloader and Gamma Stereotactic Radiosurgery, DHS 157.67:**

(17) TRAINING FOR USE OF REMOTE AFTERLOADER, TELETHERAPY AND GAMMA STEREOTACTIC RADIOSURGERY UNITS. A licensee shall require an authorized user of a sealed source for a use authorized under sub. (1) to have received training in device operation, safety procedures, and clinical use for the type of use for which authorization is sought. This training requirement may be satisfied by satisfactory completion of a training program provided by the vendor for new users or by receiving training supervised by an authorized user or authorized medical physicist, as appropriate, who is authorized for the type of use for which the individual is seeking authorization. Except as provided in s. HFS 157.61 (10), a licensee shall require an authorized user of sealed source for a use authorized under sub. (1) to have obtained written attestation under sub. (18) and to be a physician who meets either of the following requirements:

- (a) Is certified by a medical specialty board whose certification process has been recognized by the department, the NRC or an agreement state. To be recognized, a specialty board shall require all candidates for certification to do all of the following:
  1. Successfully complete a minimum of 3 years of residency training in a radiation therapy program approved by the residency review committee of the accreditation council for

graduate medical education or the royal college of physicians and surgeons of Canada or the committee on post-graduate training of the American osteopathic association.

2. Pass an examination, administered by diplomates of the specialty board, which tests knowledge and competence in radiation safety, radionuclide handling, treatment planning, quality assurance, and clinical use of stereotactic radiosurgery, remote afterloaders and external beam therapy.  
Note: Specialty boards whose certification processes have been recognized by the Department, the NRC or an agreement state will be posted on the NRC's web site at [www.nrc.gov](http://www.nrc.gov).

(b) Has completed a structured educational program in basic radionuclide techniques applicable to the use of a sealed source in a therapeutic medical unit that includes **ALL OF THE FOLLOWING:**

1. Two hundred hours of classroom and laboratory training in **ALL THE FOLLOWING AREAS:**
  - a. Radiation physics and instrumentation.
  - b. Radiation protection.
  - c. Mathematics pertaining to the use and measurement of radioactivity.
  - d. Radiation biology.
2. Five hundred hours of work experience, under the supervision of an authorized user who meets the requirements in this subsection, or equivalent agreement state requirements at a medical institution, involving **ALL OF THE FOLLOWING:**
  - a. Reviewing full calibration measurements and periodic spot checks.
  - b. Preparing treatment plans and calculating treatment doses and times.
  - c. Using administrative controls to prevent a medical event involving the use of radioactive material.
  - d. Implementing emergency procedures to be followed in the event of the abnormal operation of the medical unit or console.
  - e. Checking and using survey meters.
  - f. Selecting the proper dose and how it is to be administered.
3. Three years of supervised clinical experience in radiation therapy under an authorized user who meets the requirements in this subsection, or equivalent agreement state requirements, as part of a formal training program approved by the residency review committee for radiation oncology of the accreditation council for graduate medical education or royal college of physicians and surgeons of Canada or the committee on postdoctoral training of the American osteopathic association. This experience may be obtained concurrently with the supervised work experience required by subd. 2.