



Colorado Department
of Public Health
and Environment

**Colorado Department of Public Health and Environment
Radioactive Materials Unit
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530**

**AUTHORIZED MEDICAL PHYSICIST
TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION**

Name of Proposed Authorized Medical Physicist

Requested Authorization(s). The license authorizes the following medical uses. (Check all that apply.)

- 7.42 Ophthalmic use of Strontium-90
 7.42 Manual Brachytherapy
 7.48 Remote afterloader unit(s)
 7.48 Teletherapy unit(s)
 7.48 Gamma stereotactic radiosurgery units
 7.62 MDS Nordion TheraSpheres
 7.62 Sirtex SirSpheres
 7.62 Leksell Gamma Knife® Perfexion™

**PART I – TRAINING AND EXPERIENCE
(Select one of the three methods below)**

Training and Experience, including board certification, must have been obtained within **seven** years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provides dates, duration, and description of continuing education and experience related to the uses checked above.

- 1. Board Certification**
- Provide a copy of the board certification (see NRC's web site for approved board certifications: <http://www.nrc.gov/materials/miau/med-use-toolkit.html>). Note: for Y-90 microspheres only, the Department will accept all American Board of Radiology certificates in Medical Physics.
 - Use Table 3.c. to describe training provider and dates of training for each type of use for which authorization is being sought.
 - Skip to and complete Part II – Preceptor Attestation.

OR

- 2. Current Authorized Medical Physicist Seeking Additional Authorization For Use(s) Checked Above**
- Use the table in Section 3.c. to document the training for the new device.
 - Skip to and complete Part II – Preceptor Attestation.

OR

- 3. Education, Training, and Experience For Proposed Authorized Medical Physicist**
- Education: Document master's or doctorate degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university.

Degree	Major Field
College or University:	

- Supervised full-time medical physics training and work experience in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to one million electron volts) and brachytherapy services.

- Yes. Completed one year of full-time training in medical physics (for areas identified below) under the supervision of _____ who meets the requirements for an Authorized Medical Physicist.

AND

- Yes. Completed one year of full-time work experience in medical physics (for areas identified below) under the supervision of _____ who meets the requirements for an Authorized Medical Physicist.

AND

**AUTHORIZED MEDICAL PHYSICIST
TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION** *(continued)*

Part I – Training and Experience *(continued)*

3. Education, Training, and Experience For Proposed Authorized Medical Physicist *(continued)*

b. Supervised full-time medical physics training and work experience *(continued)*

Description of Training/Experience	Location of Training, License or Permit Number of Facility, and Medical Devices Used ¹	Dates of Training ²	Dates of Experience ²
Medical Physics			
Performing Sealed Source Leak Tests and Inventories			
Performing Decay Corrections			
Performing full calibration and periodic spot checks of external beam treatment unit(s)			
Performing full calibration and periodic spot checks of gamma stereotactic radiosurgery unit(s)			
Performing full calibration and periodic spot checks of remote afterloading unit(s)			
Conducting radiation surveys around external beam treatment unit(s), gamma stereotactic radiosurgery unit(s), and remote afterloading unit(s)			

Supervising Individual ³	License or Permit Number that lists the supervising individual as an Authorized Medical Physicist
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For the following types of use:

Manual Brachytherapy Remote afterloader unit(s) Teletherapy unit(s)
 Gamma stereotactic radiosurgery unit(s) Leksell Gamma Knife® Perfexion™

¹ Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 MeV) and brachytherapy services.

² One year full-time medical physics training and one year of full-time work experience cannot be concurrent.

³ If the supervising Medical Physicist is not an Authorized Medical Physicist, the licensee must submit evidence that the supervising Medical Physicist meets the training requirements in Appendix 7B2, 7B3, 7B4, and 7B5 for the types and uses for which the individual is seeking authorization.

AND

**AUTHORIZED MEDICAL PHYSICIST
TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)**

Part I – Training and Experience (continued)

3. Structured Educational Program For Proposed Authorized Medical Physicist (continued)

c. Describe the training provider and dates for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates			
	Manual Brachytherapy	Remote Afterloader Unit	Teletherapy Unit	Gamma Stereostatic Radiosurgery Unit
Hands-on Device Operation				
Safety Procedures				
Clinical Use				
Operation of a Treatment Planning System				

Supervising Individual (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page)	License or Permit Number that lists the supervising individual as an Authorized Medical Physicist
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For the following types of use:

Manual Brachytherapy Remote afterloader unit(s) Teletherapy unit(s)
 Gamma stereotactic radiosurgery unit(s) Leksell Gamma Knife® Perfexion™

If Applicable

<input type="checkbox"/> 7.42 Ophthalmic Use of Strontium-90	Device/Source: _____ Training Provider: _____ Dates of Training: _____
<input type="checkbox"/> 7.62 MDS Nordion Theraspheres	Manufacturer Specific Training Provider: _____ Dates of Training: _____ Please provide documentation of manufacturer specific training.
<input type="checkbox"/> 7.62 Sirtex SirSpheres	Manufacturer Specific Training Provider: _____ Dates of Training: _____ Please provide documentation of manufacturer specific training.
<input type="checkbox"/> 7.62 Leksell Gamma Knife® Perfexion™	Manufacturer Specific Training Provider: _____ Dates of Training: _____ Please provide documentation of manufacturer specific training.

d. Skip to and complete Part II – Preceptor Attestation

**AUTHORIZED MEDICAL PHYSICIST
TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION** *(continued)*

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies the training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section

Check one of the following:

1. Board Certification

I attest that _____ has satisfactorily completed the requirements in Appendix 7B1.
Name of Proposed Authorized Medical Physicist

OR

2. Structured Educational Program for Proposed Authorized Medical Physicist

I attest that _____ has satisfactorily completed one year of full-time training in medical physics and an additional year of full-time practical experience as required by Appendix 7B2.
Name of Proposed Authorized Medical Physicist

Second Section

Complete the following:

I attest that _____ has training for the types of use for which authorization is sought that includes hands-on device operation, safety procedures, clinical use, and operation of a treatment planning system.
Name of Proposed Authorized Medical Physicist

Third Section

Complete the following:

I attest that _____ has achieved a level of competency sufficient to function independently as an Authorized Medical Physicist for the following:
Name of Proposed Authorized Medical Physicist

- | | |
|---|---|
| <input type="checkbox"/> 7.42 Ophthalmic use of Strontium-90 | <input type="checkbox"/> 7.42 Manual Brachytherapy |
| <input type="checkbox"/> 7.48 Remote afterloader units | <input type="checkbox"/> 7.48 Teletherapy units |
| <input type="checkbox"/> 7.48 Gamma stereotactic radiosurgery units | <input type="checkbox"/> 7.62 MDS Nordion TheraSpheres |
| <input type="checkbox"/> 7.62 Sirtex SirSpheres | <input type="checkbox"/> 7.62 Leksell Gamma Knife® Perfexion™ |

Fourth Section

Complete the following for preceptor attestation and signature:

I meet the requirements in Appendix 7B, or equivalent NRC or Agreement State requirements, for an Authorized Medical Physicist for the following:

- | | |
|---|---|
| <input type="checkbox"/> 7.42 Ophthalmic use of Strontium-90 | <input type="checkbox"/> 7.42 Manual Brachytherapy |
| <input type="checkbox"/> 7.48 Remote afterloader units | <input type="checkbox"/> 7.48 Teletherapy units |
| <input type="checkbox"/> 7.48 Gamma stereotactic radiosurgery units | <input type="checkbox"/> 7.62 MDS Nordion TheraSpheres |
| <input type="checkbox"/> 7.62 Sirtex SirSpheres | <input type="checkbox"/> 7.62 Leksell Gamma Knife® Perfexion™ |

Name of Preceptor	Signature	Date
Telephone Number	License or Permit Number and Facility Name	

AUTHORIZED MEDICAL PHYSICIST

Specific Instructions and Guidance for Completing Colorado Department of Public Health and Environment (CDPHE) Form 313B

INTRODUCTORY INFORMATION

Name of individual

Provide the individual's complete name so that CDPHE can distinguish the training and experience received from that received by others with a similar name.

Note: Do not include personal or private information (e.g., date of birth, Social Security Number, home address, personal telephone number) as part of your qualification documentation.

Requested Authorization(s)

Check all authorizations that apply and fill in the blanks as provided.

PART I – TRAINING AND EXPERIENCE

Select one of the three methods below:

- **Method 1 – Board Certification**

The applicant or licensee may use this pathway if the proposed new authorized individual is certified by a board recognized by CDPHE. To confirm that CDPHE recognizes that board's certifications, see NRC's web site: <http://www.nrc.gov/materials/miau/med-use-toolkit.html>.

Note: An individual that is board-eligible will not be considered for this pathway until the individual is actually board-certified. Further, individuals holding other board certifications will also not be considered for this pathway. The applicant or licensee will need to provide a copy of the board certification and other documentation of training, experience, or clinical casework as indicated on the form CDPHE Form 313B.

Note: For Y-90 microsphere uses, the Department requires an authorized medical physicist to perform the required surveys and dose calculations. The only specialty board recognized by the NRC is the American Board of Radiology (ABR) exam with the Therapeutic Medical Physics subspecialty. The Department recognizes that the knowledge and training to perform duties associated with microsphere administrations are covered under Part 1 of the ABR examination and will accept all ABR certificates in Medical Physics.

Submit a copy of the board certification.

Submit a completed Section 3.c.

Device-specific training may be provided by the vendor or a supervising medical physicist authorized for the requested type of use. The applicant only has to identify the supervising individual in table 3.c. and his/her qualifications if the source of this training was an authorized medical physicist. If more than one supervising individual provided the training, identify each supervising individual by name and provide his/her qualifications.

All applicants under this pathway must also submit a completed Part II – Preceptor Attestation.

- **Method 2 – Current Authorized Medical Physicist Seeking Authorization for Additional Authorizations**

Provide the information requested for training, experience, or clinical casework as indicated on the form CDPHE Form 313B. (**Note:** This section does not include individuals who are authorized only on foreign licenses.)

Submit a completed Section 3.c.

Device-specific training may be provided by the vendor or a supervising medical physicist authorized for the requested type of use. The applicant only has to identify the supervising individual in table 3.c. and his/her qualifications if the source of this training was an authorized medical physicist. If more than one supervising individual provided the training, identify each supervising individual by name and provide his/her qualifications.

All applicants under this pathway must also submit a completed Part II – Preceptor Attestation.

- **Method 3 – Alternate Pathway for Training and Experience for Proposed New Authorized Medical Physicist**

This pathway is used for those individuals not listed on the license as authorized individuals and who do not meet the requirements for the board certification pathway. The regulatory requirements refer to two categories of training: education (section 3.a.) and supervised training and work experience (section 3.b. and section 3.c.).

Submit a completed Section 3.a. Include documentation of a graduate degree, such as a copy of a diploma or a copy of a transcript.

Submit a completed Section 3.b.

The individual must have completed one year of full-time training in medical physics and an additional year of full-time work experience, which cannot be concurrent. This is documented in Table 3.b by providing the ranges of dates for training and work experience.

If the proposed authorized medical physicist had more than one supervisor, provide the information requested in Section 3.b. for each supervising individual. If the supervising individual is not an authorized medical physicist, the applicant must provide documentation that the supervising individual meets the requirements in Part 7, Appendix 7B.

The proposed authorized medical physicist may receive the required supervised training and work experience at a single training facility or at multiple training facilities; therefore, space is provided to identify each location and date of training or experience. The date should be provided in the month/day/year (mm/dd/yyyy) format.

Submit a completed Section 3.c.

Device-specific training may be provided by the vendor or a supervising medical physicist authorized for the requested type of use. The applicant only has to identify the supervising individual in table 3.c. and his/her qualifications if the source of this training was an authorized medical physicist. If more than one supervising individual provided the training, identify each supervising individual by name and provide his/her qualifications.

All applicants under this pathway must also submit a completed Part II – Preceptor Attestation.

PART II – PRECEPTOR ATTESTATION

CDPHE defines the term “preceptor” in Part 7, section 7.2, to mean “an individual who provides, directs, or verifies training and experience required for an individual to become a radiation safety officer, an authorized user, an authorized medical physicist, an authorized nuclear pharmacist, a nuclear medical technologist, or a radiation therapy technologist.” While the supervising individual for the work experience may also be the preceptor, the preceptor does not have to be the supervising individual as long as the preceptor directs or verifies the training and experience required. The preceptor must attest in writing regarding the training and experience of any individual to serve as an authorized individual and attest that the individual has satisfactorily completed the appropriate training and experience requirements and has achieved a level of competency or a level of radiation safety knowledge sufficient to function independently. The preceptor also has to meet specific requirements.

CDPHE may require supervised work experience conducted under the supervision of an authorized individual in a licensed material use program. In this case, a supervisor is an individual who provides frequent direction, instruction, and direct oversight of the student as the student completes the required work experience in the use of byproduct material.

Supervision may occur at various licensed facilities, from a large teaching university hospital to a small private practice.

CDPHE Form 313B Part II – Preceptor Attestation has four sections. .

- The attestation for the new proposed authorized medical physicist’s certification or training is in the first section.
- The attestation for the device-specific radiation safety training is in the second section.
- The attestation for the individual’s competency to function independently as an authorized medical physicist for specific devices requested by the applicant is in the third section.
- The fourth and final section requests specific information about the preceptor’s authorization to use licensed material, in addition to the preceptor’s signature.

The preceptor for a new proposed authorized medical physicist must fill out all four sections.

The preceptor for an authorized medical physicist seeking additional authorizations must fill out the second, third, and fourth sections.