

DEPARTMENT OF HEALTH AND SOCIAL SERVICES
DIVISION OF PUBLIC HEALTH
4400 Health Systems Protection

4466 Radiation Technologists/Technicians (Certification)

This Regulation was approved by the Authority on Radiation Protection on February 17, 1989, pursuant to 16 **Del.C.** §7406(b). Radiation Technologists/Technicians are subject to certification by the Authority on Radiation Protection. This Regulation is effective February 10, 2006.

1.0 Purpose and Scope

The Authority hereby finds and declares that the citizens of the State of Delaware are entitled to the maximum protection practicable from the harmful effects of excessive and improper exposure to ionizing radiation; that the protection can be increased by requiring appropriate education and training of technologists and technicians operating medical and dental equipment and sources emitting ionizing radiation; and that it is therefore necessary to establish certification standards in radiation protection principles for these operators and to provide for their appropriate examination and certification.

2.0 Title of Regulation

This regulation shall be known as the "Radiation Technologist/Technician Certification".

3.0 Severability

If any provision or application of any provision of this regulation is held invalid, that invalidity shall not affect other provisions or applications of this regulation.

4.0 Definitions

As used in this regulation:

"Agency" means the administrative agent of the Authority on Radiation Protection; i.e., the Office of Radiation Control, Division of Public Health, Department of Health and Social Services.

"ARRT" means American Registry of Radiologic Technologists. A national certifying body that credentials through a national test graduates of JRCERT approved radiologic technology programs. The ARRT also provides the State Limited Scope Licensing Examination to be used by individuals who do not meet the national registry requirements.

"ASRT" means the American Society of Radiologic Technologists, the national society of radiologic technologists and radiation therapists that establishes national practice standards and guidelines for the practice of medical imaging and therapy.

"Authority" means the Authority on Radiation Protection as specified by 16 **Del.C.** §7404.

"Cardiovascular radiologic technologist" means any individual, other than a licensed physician who has trained to assist with procedures that require the use of radiation invasive cardiology.

"CBRPA" means the Certification Board for Radiology Practitioner Assistants, a national certifying body that credentials, through a national test, graduates of recognized radiologist assistant programs.

"CCI" means Cardiovascular Credentialing International, a national certifying body that credentials technologists in invasive cardiovascular procedures using radiation.

"Certificate" means a document issued by the Agency recognizing the successful completion of an Authority approved certification exam. The "certificate" allows for the practice of radiation technology as specified by the level of examination the individual has passed. Other credentials include "temporary".

"Certification examination" means any examination satisfactory to the Authority that is used to determine the competency of radiation technologists/technicians in the "principles and practice of radiation protection".

"Certified dental assistant" or **"CDA"** means an individual holding a national credential issued by the Dental Assisting National Board (DANB).

TITLE 16 HEALTH AND SAFETY

DELAWARE ADMINISTRATIVE CODE

"Chiropractic" means a drugless system of health care based on the principle that interference with the transmission of nerve impulses may cause disease, per 24 **Del.C.**, Ch. 7, Board of Chiropractic, as amended.

"CODA" means Commission on Dental Accreditation.

"DANB" means Dental Assisting National Board which issues national credentials to eligible dental assistants.

"Dentist" shall mean a person who is qualified to practice dentistry as prescribed in 24 **Del.C.**, Ch. 11, Dentistry and Dental Hygiene, as amended.

"ISCD" means International Society of Clinical Densitometry.

"JRCECT" means Joint Review Committee on Education in Cardiovascular Technology

"JRCERT" means Joint Review Committee on Education in Radiologic Technology

"JRCNMT" means Joint Review Committee on Nuclear Medicine Technology.

"Licensed practitioner" means an individual licensed to practice medicine, dentistry, podiatry, chiropractic, osteopathy, or veterinary medicine in this state. For the purpose of this regulation, advanced practice registered nurses (APRN) and physicians assistants (PA) may order diagnostic or supportive x-ray procedures for patients in accordance with Title 24, Delaware Code. APRNs and PAs who supervise, perform, view, or interpret x-ray procedures do so within their scope of practice, as governed by Title 24, Delaware Code.

"Medical radiologic technologist – bone densitometry only" means a certificate conferred on an individual holding a primary national credential in nuclear medicine technology or radiation therapy who subsequently passes a post-primary examination in bone densitometry.

"Medical radiologic technologist – CT only" means a certificate conferred on an individual holding a primary national credential in nuclear medicine technology or radiation therapy who subsequently passes a post-primary examination in computed tomography (CT), for purposes of performing modalities combining nuclear medicine and radiologic technology, such as PET/CT.

"NMTCB" means Nuclear Medicine Technologist Certification Board which provides national credentialing of nuclear medicine technologists.

"Nuclear medicine technologist" means an individual, other than a licensed practitioner, who uses radiopharmaceutical agents on humans for diagnostic or therapeutic purposes.

"PET/CT" means positron emission tomography/computed tomography, a medical procedure consisting of radiopharmaceutical agents combined with the use of a form of x-ray machine. This hybrid modality requires dual certification as a nuclear medicine technologist and medical radiologic technologist in this state.

"Physician" means an allopathic doctor of medicine and surgery or a doctor of osteopathic medicine and surgery who is registered and certified to practice medicine pursuant to 24 **Del.C.**, Ch. 17, Medical Practice Act, as amended.

"Podiatrist" means a person who is qualified to practice podiatry and is licensed under 24 **Del.C.**, Ch. 5, Podiatry, as amended.

"Principal supervisor" means the licensed practitioner responsible for use of x-ray equipment or other device generating ionizing radiation in the healing arts.

"Qualified expert" means an individual who has satisfactorily fulfilled the training and experience requirements consistent with achieving a level of competency sufficient to function effectively in the position for which registration is sought. Such individuals must demonstrate to the satisfaction of the Agency their qualifications for example, individuals certified in the appropriate field by the American Board of Radiology, or the American Board of Health Physics, or the American Board of Medical Physics, or those having equivalent qualifications. With reference to the calibration of radiation therapy equipment, an individual, in addition to the above qualifications, must be qualified in accordance with Part F and Part X of the Delaware Radiation Control Regulations, 16 **DE Admin. Code** 4465, as amended.

"Radiation technician" means an individual who has not graduated from an approved program in radiation technology, but has passed an Authority approved examination.

"Radiation technologist" means an individual who has successfully completed a JRCERT/JRCCVT approved or equivalent, recognized program in radiation technology and has passed a national credentialing examination in his/her field of specialization.

"Radiation technology" means the use of a radioactive substance or equipment emitting ionizing radiation on humans for diagnostic or therapeutic purposes.

"Radiation therapist" means an individual, other than a licensed practitioner, who exposes humans to ionizing radiation for therapeutic purposes.

"Radiologist" means a physician specializing in radiology certified by or board-eligible for the American Board of Radiology, the American Osteopathic Board of Radiology, the Royal College of Radiologists, or the Royal College of Physicians and Surgeons of Canada.

"Radiologist assistant" or "RA" means a radiation technologist, who has successfully completed an American Registry of Radiologic Technologists (ARRT)-recognized program for radiologist assistants and has passed the ARRT-registered radiologist assistant examination or the Certification Board for Radiology Practitioner Assistant examination.

"Source of radiation" means a radioactive material, or any device or equipment emitting or capable of producing ionizing radiation.

"SPECT/CT" means single-photon emission computed tomography (SPECT), a nuclear medicine tomographic imaging technique using gamma rays combined with the use of a form of x-ray machine. This hybrid modality requires dual certification as a nuclear medicine technologist and medical radiologic technologist in this state.

"Temporary certificate" means a certificate issued by the Agency as a temporary authorization to practice radiation technology to any applicant who has complied with the provisions of this regulation and is scheduled for the next available national credentialing examination.

"Veterinarian" shall mean a person who has received a degree in veterinary medicine from a school of veterinary medicine, per 24 **Del.C.**, Ch. 33, Veterinarians, as amended.

28 DE Reg. 313 (10/01/24)

28 DE Reg. 668 (03/01/25)

5.0 Legal Titles

- 5.1 The Authority shall establish certification requirements for radiation technologists/technicians; i.e., certified dental assistant, dental radiation technician, medical radiologic technologist, medical radiation technician, nuclear medicine technologist, medical radiologic technologist – bone densitometry only, medical radiologic technologist – CT only, radiation therapist and cardiovascular radiologic technologist, and radiologist assistant. Individuals holding these certificates shall be recognized by their title.
- 5.2 Any technologist or technician certified under this regulation is authorized to use a source of radiation on humans for diagnostic or therapeutic purposes under the supervision of a licensed practitioner, and in accordance with the Delaware Radiation Control Regulations.
- 5.3 Holders of a certificate (legal title) under this regulation shall display in public view the official certificate or a verified copy in each place of regular employment.
- 5.4 Any radiologist assistant certified under this regulation is authorized to use a source of radiation on humans for diagnostic or therapeutic purposes under the supervision of a radiologist and in accordance with the Delaware Radiation Control Regulations (16 **DE Admin. Code** 4465).
 - 5.4.1 A certified radiologist assistant may, under the supervision of a radiologist:
 - 5.4.1.1 Perform patient assessment, and participate in patient management and patient education;
 - 5.4.1.2 Evaluate image quality, make initial observations, and communicate observations to the supervising radiologist;
 - 5.4.1.3 Administer contrast media or other medications at the direction of the supervising radiologist;
 - 5.4.1.4 Perform or assist the supervising radiologist with procedures consistent with the guidelines adopted by the American Society of Radiologic Technologists.
 - 5.4.2 A certified radiologist assistant is not authorized to provide official interpretation of imaging studies or prescribe medications or therapies.

28 DE Reg. 313 (10/01/24)

28 DE Reg. 668 (03/01/25)

6.0 Certification Process

- 6.1 Classification of Certificates
 - 6.1.1 Certificate (Subsection 7.1)
 - 6.1.2 Temporary certificate (Subsection 7.2)
- 6.2 Application. The Agency shall accept an application for credentialing from any radiation technologist/technician who is at least 18 years of age, or who is currently enrolled in and attending an educational program in

TITLE 16 HEALTH AND SAFETY

DELAWARE ADMINISTRATIVE CODE

radiation technology and who pays a non-refundable application and examination fee (if applicable) established by rule of the Authority. Each application submitted must be complete, or it will be returned to the applicant.

- 6.2.1 Initial and renewal application fees shall be established at \$50 when paid on time. Renewal fee is \$100 when payment is received by the agency 1-180 days after expiration date on the certificate (based on post-mark).
- 6.2.2 The initial application fee shall be waived for applicants who document they are enrolled in a vocational-technical high school Dental Assisting Program in Delaware.
- 6.2.3 The Agency shall issue a certificate to all applicants who provide proof that they hold a current national credential from an Authority-recognized, national voluntary credentialing body, see subsection 6.3.5 of this regulation.

6.3 Examinations

- 6.3.1 The examination process shall be administered by test administration companies under contract to the Agency. The fee for examination shall accompany the application request, where applicable.
- 6.3.2 The Authority shall accept an application for certification from any applicant who discloses conviction of a felony if the application is complete and is submitted with photocopy of court documents that include charges, and disposition papers.
- 6.3.3 The Authority may accept, in lieu of an examination, a current credential by a recognized national voluntary credentialing body, (See subsection 6.3.5 of this regulation) issued on the basis of an examination consistent with the requirements established by the Authority, provided that the radiation protection standards to which that body adheres are at least as stringent as those established by the Authority.
- 6.3.4 An examinee who fails to pass the Authority-approved certification examination may be re-tested 2 times per calendar year, provided the prescribed application is submitted and examination fees for each re-examination are paid.
- 6.3.5 List of National Credentialing Organizations Acceptable for Delaware Certification
 - 6.3.5.1 American Registry of Radiologic Technologists (ARRT)
 - 6.3.5.2 Dental Assisting National Board (DANB)
 - 6.3.5.3 Nuclear Medicine Technologist Certification Board (NMTCB)
 - 6.3.5.4 Cardiovascular Credentialing International (CCI)
 - 6.3.5.5 International Society of Clinical Densitometry (ISCD)
 - 6.3.5.6 Certification Board of Radiology Practitioner Assistants (CBRPA)

28 DE Reg. 313 (10/01/24)

7.0 Issuing Certification

- 7.1 The Agency may issue a certificate to each qualified applicant who has successfully met the requirements under Section 6.0 of this regulation, is at least 18 years of age, and has paid the prescribed fees, (Schedule A). Furthermore, the certificate shall be issued upon verifying that the applicant has passed a certification examination acceptable to the Authority (see subsection 6.3 of this regulation). The initial certificate shall expire after a period of 3 years from date of issue. Certificates based on national credentials will automatically terminate if the national credentials are permitted to lapse, or are revoked.
- 7.2 Temporary Certificate. The Agency may issue a temporary certificate to a student enrolled in a post-secondary accredited school of radiation technology who is approved to take a national credentialing exam. Only 1 temporary certificate may be issued if the Agency finds that it will not violate the purpose of this regulation or endanger the public health and safety. The temporary certificate shall grant the same rights as the credential for which the applicant is awaiting examination. Such temporary certificate may not be renewed by the Agency without the approval of the Authority and only for just cause. The temporary certificate shall expire:
 - 7.2.1 On the date of notification of the results of the certification examination; or,
 - 7.2.2 On the certification examination date if the applicant does not take the examination; or,
 - 7.2.3 In any case, after a maximum of 90 days from the date of issue.
- 7.3 Renewal of Certificate. A valid certificate may be renewed by the Agency for a period of 3 years upon payment of a renewal fee (see Schedule A) established by the Authority. Applicants for renewal of certificates based on national credentials must provide proof that the national credentials are currently valid. A photocopy of the national credential membership card or certificate in good standing is the proof required.

- 7.4 A radiation technologist/technician whose certificate expires is not permitted to administer radiation to human patients until the expired certificate is renewed.
- 7.5 A radiation technologist/technician whose certificate has lapsed for a period of less than 180 days shall apply for renewal provided that the radiation technologist/technician presents evidence of having previously passed a certification examination approved by the Authority and pays the prescribed renewal fee.
- 7.6 Re-certification of Lapsed Certificate. A radiation technologist/technician whose certificate has lapsed for more than 180 days shall:
 - 7.6.1 Apply for re-certification,
 - 7.6.2 Apply to take the appropriate certification examination, show proof of having passed an examination acceptable to the Authority, or show proof of currently valid national credentials,
 - 7.6.3 Pay the re-certification fee and re-examination (if applicable) fee.
- 7.7 A radiation technologist/technician whose certificate has expired shall not expose humans to ionizing radiation until and unless the radiation technologist/technician is re-certified. Failure to comply with this requirement will subject the technician's/technologist's employer to citation under the Delaware Radiation Control Regulations (16 DE Admin. Code 4465).
- 7.8 The Agency may issue verification of certification to each applicant seeking to have their Delaware certificate recognized for licensure by another state, upon receipt of a complete, official application form, and payment of the prescribed application fee.
- 7.9 An approved applicant whose check for fee payment is returned marked insufficient funds, account closed, or payment stopped shall remit to the agency a money order or check for guaranteed funds (cashier's check or money order) in the amount of the application or examination fee plus the returned check fee within 30 days of the date of receipt of the agency's notice. Otherwise, the application and the approval shall be invalid.

28 DE Reg. 313 (10/01/24)

8.0 Limitations of Certification

- 8.1 Nothing in the provisions of this regulation relating to radiation technology shall apply to the practice of licensed practitioners herein defined.
- 8.2 The requirement for certification shall not apply to a student enrolled in and attending an accredited school of radiation technology who applies ionizing radiation to humans in such an educational program while under the supervision of a certified radiation technologist.
- 8.3 A certificate, registration or license issued by another state will not be accepted as a valid equivalent radiation technologist/technician certification by the Authority.

9.0 Discipline, Sanctions, Hearing Procedures, and Appeals

- 9.1 Grounds for Denial of a Certificate or Discipline of a Certificate Holder
 - 9.1.1 Any denial of an application for a certificate or discipline of a certificate holder may be made by the Authority or the Agency based upon any of the following:
 - 9.1.1.1 Any false or misleading statement or nondisclosure of any information requested during the application or renewal process or during any investigation of the certificate holder;
 - 9.1.1.2 Any prior discipline or administrative action against the applicant or certificate holder by any agency or jurisdiction including but not limited to Delaware of or concerning the applicant's or certificate holder's actions or inactions in connection with performance as a radiation technologist or similar occupation;
 - 9.1.1.3 Any plea of guilty or nolo contendere to or any conviction of any felony or class A misdemeanor or any crime substantially related to the practice involving radiation technology; a pardon does not affect the application of the foregoing;
 - 9.1.1.4 Any dishonorable, unethical or other conduct likely to deceive, defraud or harm the public;
 - 9.1.1.5 The practice of radiation technology or other activity regulated by the Authority without a certificate or other authorizing document or under a false or assumed name;
 - 9.1.1.6 Misconduct, including but not limited to sexual misconduct, incompetence, or gross negligence or pattern of negligence in the practice of radiation technology or other activity regulated by the Authority;
 - 9.1.1.7 Assisting an unauthorized person to practice any activity for which you hold a certificate;

TITLE 16 HEALTH AND SAFETY

DELAWARE ADMINISTRATIVE CODE

- 9.1.1.8 Any physical or mental impairment which substantially limits the ability to perform the essential functions of the practice which is authorized by the certificate; with or without reasonable accommodation;
 - 9.1.1.9 Conduct that would constitute a crime substantially related to the practice for which a certificate has been issued, or the practice of radiation technology;
 - 9.1.1.10 Has engaged in any unprofessional conduct, or the willful neglect of a patient;
 - 9.1.1.11 The practice for which a certificate has been applied for or has been issued under a false or assumed name or identity;
 - 9.1.1.12 Excessive use or abuse of drugs including alcohol;
 - 9.1.1.13 Any false, fraudulent, or forged statement or document or the use of any fraudulent, deceitful, dishonest, or unethical practice in connection with the practice regulated by the Authority;
 - 9.1.1.14 Any other dishonorable or unprofessional actions or inactions which would bring disrepute upon the profession or activity regulated by the Authority or for which you hold a certificate issued by the Authority.
- 9.2 Sanctions. The Authority on Radiation Protection may take any of the following actions singly or in combination when it finds a certificate holder or an applicant has violated any of the provisions of subsections 9.1 through 9.1.1.14 or the Rules or Regulations of the Authority:
- 9.2.1 Revocation of the certificate to practice;
 - 9.2.2 Suspension of the certificate for a defined period of time;
 - 9.2.3 Suspension of the certificate to practice upon conditions until the certificate holder provides proof that the conditions for which the suspension was issued no longer exist or have been met;
 - 9.2.4 Public or private censure of the certificate holder;
 - 9.2.5 Issuance of a Letter of Reprimand;
 - 9.2.6 Denial of an application for a certificate;
 - 9.2.7 Refusal to renew a certificate;
 - 9.2.8 Such other and further relief as may be warranted including but not limited to the actions under 16 **Del.C.** §§7412; 7413; 7416; 7415.
- 9.3 Authority Proceedings
- 9.3.1 The Agency may, upon a written complaint or upon its own initiative, investigate whether a certificate holder or applicant has engaged in conduct which might result in sanctions.
 - 9.3.2 The Agency shall investigate such complaint and take such evidence as it deems appropriate and may subpoena records and documents relating thereto.
 - 9.3.3 A copy of the Complaint shall be provided to the certificate holder or applicant who shall have 20 days to provide a written response.
 - 9.3.4 If at the conclusion of the investigation and consideration of the response, if any, the Agency determines that a formal complaint shall be issued upon the certificate holder, it shall provide a copy of the complaint to the Authority.
 - 9.3.5 If the Authority determines that a complaint should be issued then the Agency shall notify the alleged violator of the complaint and offer the alleged violator the opportunity for a hearing, which must be requested within 30 days of the date of notification. If the alleged violator does not timely request a hearing, the proposed sanctions shall become final. If the alleged violator makes a timely request for a hearing, the Authority shall schedule the hearing and give the alleged violator at least 30 days' notice prior to the date fixed for the hearing.
 - 9.3.6 In all proceedings herein:
 - 9.3.6.1 The alleged violator may be represented by counsel who shall have the right of examination and cross-examination.
 - 9.3.6.2 The alleged violator and the Agency may subpoena witnesses. Subpoenas shall be issued by the Chairman or Vice Chairman of the Authority upon written request.
 - 9.3.6.3 Testimony before the Authority shall be under oath. Any member of the Authority shall have power to administer oaths for this purpose.
 - 9.3.6.4 A stenographic record of the hearing shall be made by a qualified court reporter. At the request and expense of either party such record shall be transcribed with a copy to the other party.

TITLE 16 HEALTH AND SAFETY
DELAWARE ADMINISTRATIVE CODE

7

- 9.3.6.5 The decision of a majority of the members of the Authority who are present and constitute a quorum shall be based upon a preponderance of the evidence. If the charges are supported by such evidence, the Authority may impose any sanction provided for herein. The discussion by the members of the Authority and the vote shall be in public session.
- 9.3.6.6 The written decision of the Authority will be sent to the alleged violator and his/her counsel by certified mail.
- 9.3.6.7 The Agency shall notify the employer of the alleged violator of any final order of the Authority regarding any action taken against the certification of that employee by registered, return receipt mail.

9.4 Appeals

- 9.4.1 Any final order entered in any proceeding by the Authority shall be subject to judicial review by the Delaware Superior Court per 16 Del.C. §7412(c).
- 9.4.2 Appeals shall be handled in accordance with Delaware Superior Court Civil Rule 72.

- 9.5 Unlawful Practice of Radiation Technology. No person shall practice or offer to practice radiation technology or claim to be a registered or certified radiation worker in Delaware, or shall use any title, abbreviation, sign, card, or device to indicate that such person is certified pursuant to this regulation unless such person is actually certified by the Authority.

28 DE Reg. 313 (10/01/24)

SCHEDULE A
Certification Fees

| Certificate Category | Initial Application Fee | On-Time Renewal Fee (postmarked prior to expiration date) | Late Renewal Fee (postmarked 1-180 days after expiration date) |
|--|--------------------------------|--|---|
| Dental Radiation Technician, or Certified Dental Assistant (CDA) | \$50 | \$50 | \$100 |
| Medical Radiation Technician | \$50 | \$50 | \$100 |
| Medical Radiologic Technologist | \$50 | \$50 | \$100 |
| Nuclear Medicine Technologist | \$50 | \$50 | \$100 |
| Radiation Therapist | \$50 | \$50 | \$100 |
| Cardiovascular Radiologic Technologist | \$50 | \$50 | \$100 |
| Radiologist Assistant | \$50 | \$50 | \$100 |
| Verification of Licensure – Other State Forms | \$50 | | |
| Returned Check | \$25 | | |

The fees listed above in Schedule A apply to each type of certificate. See Section 5.0 and Section 7.0.

28 DE Reg. 313 (10/01/24)

SCHEDULE B

LIST OF NATIONAL CREDENTIALING ORGANIZATIONS ACCEPTABLE FOR DELAWARE CERTIFICATION

1. American Registry of Radiologic Technologists (ARRT)
2. Dental Assisting National Board (DANB)
3. Nuclear Medicine Technologist Certification Board (NMTCB)
4. Cardiovascular Credentialing International (CCI)
5. International Society Clinical Densitometry (ISCD)

6 DE Reg. 99 (07/01/02)

7 DE Reg. 639 (11/01/03)

9 DE Reg. 1213 (02/01/06)

TITLE 16 HEALTH AND SAFETY
DELAWARE ADMINISTRATIVE CODE

17 DE Reg. 983 (04/01/14)

28 DE Reg. 313 (10/01/24)

28 DE Reg. 668 (03/01/25)