



# RULE-MAKING ORDER

## PERMANENT RULE ONLY

**CR-103P (December 2017)**  
**(Implements RCW 34.05.360)**

CODE REVISER USE ONLY

OFFICE OF THE CODE REVISER  
STATE OF WASHINGTON  
FILED

**DATE: December 20, 2023**

**TIME: 3:31 PM**

**WSR 24-02-007**

**Agency:** Department of Health

**Effective date of rule:**

**Permanent Rules**

- ☒ 31 days after filing.  
☐ Other (specify) \_\_\_\_\_ (If less than 31 days after filing, a specific finding under RCW 34.05.380(3) is required and should be stated below)

**Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?**

- ☐ Yes ☒ No If Yes, explain:

**Purpose:** Review and update of chapter 246-926 WAC Radiological technologists. The Department of Health (department) completed a periodic rule review, as required by RCW 43.70.041, and determined that chapter 246-926 WAC was in need of updating and clarification. The department is adopting amendments to chapter 246-926 WAC to clarify, streamline, and modernize the regulations of cardiovascular invasive specialists, diagnostic radiologic technologists, therapeutic radiologic technologists, nuclear medicine technologists, radiologist assistants, and x-ray technicians. This includes removing outdated provisions, updating outdated terms and citations, clarifying credentialing and competency requirements, clarifying allowable duties for radiological technologists and x-ray technicians, repealing and adding new sections of rule, and renaming the chapter to better reflect all types of professions credentialed under the chapter.

The department received two petitions for rulemaking specific to WAC 46-926-300 and 246-926-400. One request asked to change supervision for certain tasks from personal supervision to direct supervision under WAC 246-926-300. The second request asked to prohibit certain tasks for cardiovascular invasive specialists (CVIS). The adopted rules incorporate some tasks changed from personal to direct supervision based on education and training. No change was made to CVIS tasks because RCW 18.84.020 defines CVIS to include parenteral procedures.

The adopted amendments to chapter 246-926 WAC include the repeal of ten rule sections with several sections renumbered into new sections to group requirements more effectively. Three of the new sections describe the certification requirements and scope of practice for diagnostic radiologic, therapeutic radiologic and nuclear medicine technologists, CVIS, and x-ray technicians. These amendments protect the public by promoting high standards of professional performance, requiring professional accountability, credentialing those persons who seek to provide radiological technology under the title of radiologic imaging professionals, and by creating standards for all practitioners who have achieved a particular level of competency. The adopted rules establish enforceable licensing requirements and safety mechanisms for patients receiving imaging services.

**Citation of rules affected by this order:**

New: WAC 246-926-095, 246-926-135, 246-926-155, 246-926-165, 246-926-500, 246-926-510, 246-926-600

Repealed: WAC 246-926-040, 246-926-050, 246-926-060, 246-926-070, 246-926-080, 246-926-090, 246-926-140, 246-926-145, 246-926-170, 246-926-190

Amended: WAC 246-926-020, 246-926-030, 246-926-100, 246-926-110, 246-926-120, 246-926-130, 246-926-150, 246-926-180, 246-926-300, 246-926-310, 246-926-400, 246-926-410

Suspended: None

**Statutory authority for adoption:** RCW 18.84.040, 43.70.040

**Other authority:**

**PERMANENT RULE (Including Expedited Rule Making)**Adopted under notice filed as WSR 23-13-112 on 6/21/2023 (date).

Describe any changes other than editing from proposed to adopted version: None

If a preliminary cost-benefit analysis was prepared under RCW 34.05.328, a final cost-benefit analysis is available by contacting:

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Web site: None

Other: None

**Note: If any category is left blank, it will be calculated as zero.  
No descriptive text.**

**Count by whole WAC sections only, from the WAC number through the history note.  
A section may be counted in more than one category.**

**The number of sections adopted in order to comply with:**

Federal statute:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>
Federal rules or standards:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>
Recently enacted state statutes:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>

**The number of sections adopted at the request of a nongovernmental entity:**

New	<u>0</u>	Amended	<u>1</u>	Repealed	<u>0</u>
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**The number of sections adopted on the agency's own initiative:**

New	<u>7</u>	Amended	<u>11</u>	Repealed	<u>10</u>
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**The number of sections adopted in order to clarify, streamline, or reform agency procedures:**

New	<u>0</u>	Amended	<u>1</u>	Repealed	<u>4</u>
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**The number of sections adopted using:**

Negotiated rule making:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>
Pilot rule making:	New	<u>0</u>	Amended	<u>0</u>	Repealed	<u>0</u>
Other alternative rule making:	New	<u>7</u>	Amended	<u>12</u>	Repealed	<u>10</u>

**Date Adopted:** 12/20/2023**Name:** Kristin Peterson, JD for Umair A. Shah, MD, MPH**Title:** Chief of Policy for Secretary of Health**Signature:**

**Chapter 246-926 WAC**  
**((~~RADIOLOGICAL TECHNOLOGISTS~~)) RADIOLOGIC IMAGING PROFESSIONALS**

AMENDATORY SECTION (Amending WSR 12-10-094, filed 5/2/12, effective 5/3/12)

**WAC 246-926-020 Definitions.** The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "ARRT" means the American Registry of Radiologic Technologists.

(2) "Cardiovascular invasive specialist" means a person certified under chapter 18.84 RCW to assist in cardiac or vascular catheterization procedures.

(3) "Computed tomography" or "CT" means technology that uses computer-processed X-rays to produce tomographic images or virtual slices of specific areas of the patient's body or scanned object.

~~((4))~~ (4) "Department" means the department of health.

~~((4))~~ (5) "Direct supervision" means the appropriate licensed practitioner is on the premises and is quickly and easily available.

(a) For a diagnostic radiologic, therapeutic radiologic, or nuclear medicine (~~radiologic~~) technologist, the appropriate licensed practitioner is a physician licensed under chapter 18.71 or 18.57 RCW.

(b) For a radiologist assistant, the appropriate licensed practitioner is a radiologist.

~~((5))~~ (6) "General supervision" for a radiologist assistant means the procedure is furnished under the supervising radiologist's overall direction and control. The supervising radiologist must be on-call or be available for consultation.

~~((6))~~ "Hospital" means any health care institution licensed pursuant to chapter 70.41 RCW.

~~((7))~~ "Nursing home" means any health care institution which comes under chapter 18.51 RCW.

~~((8))~~ (7) "Indirect supervision" means the supervising physician is on site no less than half-time.

(8) "Licensed practitioner" means a licensed health care practitioner performing the services within the person's authorized scope of practice.

(9) "NMTCB" means the nuclear medicine technology certification board.

(10) "Peripherally inserted central catheter" or "PICC line" means a form of intravenous access for administration of substances.

(11) "Personal supervision" means the supervising physician must be in the room during the performance of the procedure.

(a) For a cardiovascular invasive specialist, the supervising physician is a physician licensed under chapter 18.71 or 18.57 RCW.

(b) For a radiologist assistant, the supervising physician is a radiologist.

~~((9))~~ ~~"Radiological")~~ (12) "Radiologic technologist" means a person certified under chapter 18.84 RCW.

~~((10))~~ (13) "Radiologist" means a licensed physician licensed under chapter 18.71 or 18.57 RCW and certified by the American Board of Radiology or the American Osteopathic Board of Radiology.

~~((11))~~ (14) "Radiologist assistant" means an advanced-level diagnostic radiologic technologist certified under chapter 18.84 RCW.

~~((12))~~ (15) "Registered X-ray technician" means a person who is registered with the department, and who applies ionizing radiation at the direction of a licensed practitioner.

~~((13) "Unprofessional conduct" as used in this chapter means the conduct described in RCW 18.130.180.))~~ (16) "Secretary" means the secretary of the department of health.

(17) "Venipuncture" means a procedure to puncture a vein to withdraw blood or to start intravenous infusion related to radiologic technology but does not include the insertion of PICC lines.

AMENDATORY SECTION (Amending WSR 92-05-010, filed 2/7/92, effective 2/19/92)

**WAC 246-926-030 Mandatory reporting.** ~~((1) All reports required by this chapter shall be submitted to the department as soon as possible, but no later than twenty days after a determination is made.~~

~~(2) A report should contain the following information if known:~~

~~(a) The name, profession, address, and telephone number of the person making the report.~~

~~(b) The name and address and telephone numbers of the radiologic technologist or X-ray technician being reported.~~

~~(c) The case number of any client whose treatment is a subject of the report.~~

~~(d) A brief description or summary of the facts which gave rise to the issuance of the report, including dates of occurrences.~~

~~(e) If court action is involved, the name of the court in which the action is filed along with the date of filing and docket number.~~

~~(f) Any further information which would aid in the evaluation of the report.~~

~~(3) Mandatory reports shall be exempt from public inspection and copying to the extent permitted under RCW 42.17.310 or to the extent that public inspection or copying of the report or any portion of the report would invade or violate a person's right to privacy as set forth in RCW 42.17.255.~~

~~(4) A person is immune from civil liability, whether direct or derivative, for providing information to the department pursuant to RCW 18.130.070.))~~ Any person including, but not limited to, a cardiovascular invasive specialist, radiologic technologist, radiologist assistant, X-ray technician, health care facility, or governmental agency must report to the department in compliance with the uniform mandatory reporting requirements in WAC 246-16-200 through 246-16-270.

#### NEW SECTION

**WAC 246-926-095 Diagnostic radiologic, therapeutic radiologic, and nuclear medicine technologists—Certification.** (1) To obtain certification as a diagnostic radiologic technologist, an applicant must submit:

- (a) A completed application on forms provided by the secretary;
  - (b) Proof of successfully passing an examination in radiography listed in WAC 246-926-135;
  - (c) Proof of completed education in one of the following:
    - (i) A course of instruction from a school that has received accreditation by the Joint Review Committee on Education in Radiologic Technology or the former American Medical Association Committee on Allied Health Education and Accreditation;
    - (ii) Military education, training, and experience listed in WAC 246-926-155; or
    - (iii) Alternative training listed in WAC 246-926-100 and 246-926-110;
  - (d) Written verification of any licenses held, submitted directly from that licensing entity;
  - (e) Applicable fees defined in WAC 246-926-990; and
  - (f) Any other information determined by the secretary.
- (2) To obtain certification as a therapeutic radiologic technologist, an applicant must submit:
- (a) A completed application on forms provided by the secretary;
  - (b) Proof of successfully passing an examination in radiation therapy technology listed in WAC 246-926-135;
  - (c) Proof of completed education in one of the following:
    - (i) A course of instruction from a school that has received accreditation by the Joint Review Committee on Education in Radiologic Technology or the former American Medical Association Committee on Allied Health Education and Accreditation;
    - (ii) Military education, training, and experience listed in WAC 246-926-155; or
    - (iii) Alternative training listed in WAC 246-926-100 and 246-926-120;
  - (d) Written verification of any licenses held, submitted directly from that licensing entity;
  - (e) Applicable fees defined in WAC 246-926-990; and
  - (f) Any other information determined by the secretary.
- (3) To obtain certification as a nuclear medicine technologist, an applicant must submit:
- (a) A completed application on forms provided by the secretary;
  - (b) Proof of successfully passing an examination in nuclear medicine listed in WAC 246-926-135 or by the NMTCB;
  - (c) Proof of completed education in one of the following:
    - (i) A course of instruction from a school that has received accreditation by the Joint Review Committee for Educational Programs in Nuclear Medicine Technology or the former American Medical Association Committee on Allied Health Education and Accreditation; or
    - (ii) Military education, training, and experience listed in WAC 246-926-155; or
    - (iii) Alternative training listed in WAC 246-926-100 and 246-926-130;
  - (d) Written verification of any licenses held, submitted directly from that licensing entity;
  - (e) Applicable fees defined in WAC 246-926-990; and
  - (f) Any other information determined by the secretary.

**WAC 246-926-100** (~~((Definitions—Alternative training radiologic technologists.))~~ **Alternative training—Definitions, supervision requirements.** (1) ~~((Definitions.))~~ For the purposes of certifying diagnostic radiologic, therapeutic radiologic, and nuclear medicine technologists by alternative training methods the following definitions apply:

- ~~((a) "One quarter credit hour" equals eleven "contact hours";~~
- ~~((b) "One semester credit hour" equals sixteen contact hours;~~
- ~~((c) "One contact hour" is considered to be fifty minutes lecture time or one hundred minutes laboratory time;~~
- ~~((d) "One clinical year" is considered to be 1900 contact hours.~~
- ~~((e) "Direct supervision" means the supervisory clinical evaluator is on the premises and is quickly and easily available.~~
- ~~((f) "Indirect supervision" means the supervising physician is on site no less than half-time.~~

~~((g) "Allied health care profession" means an occupation for which programs are accredited by the Joint Review Committee on Education in Radiologic Technology, the Joint Review Committee for Educational Programs in Nuclear Medicine Technology or the former American Medical Association Committee on Allied Health Education and Accreditation.~~

~~((h) "Formal education" means education obtained from postsecondary vocational/technical schools and institutions, community or junior colleges, and senior colleges and universities accredited by regional accrediting associations or by other recognized accrediting agencies or programs approved by the Joint Review Committee on Education in Radiologic Technology, the Joint Review Committee for Educational Programs in Nuclear Medicine Technology or the former American Medical Association Committee on Allied Health Education and Accreditation.))~~

(a) "Allied health care profession" means an occupation for which programs are accredited by the Joint Review Committee on Education in Radiologic Technology, the Joint Review Committee for Educational Programs in Nuclear Medicine Technology or the former American Medical Association Committee on Allied Health Education and Accreditation;

(b) "Formal education" means education obtained from postsecondary vocational/technical schools and institutions, community or junior colleges, and senior colleges and universities accredited by regional accrediting associations or by other recognized accrediting agencies or programs approved by the Joint Review Committee on Education in Radiologic Technology, the Joint Review Committee for Educational Programs in Nuclear Medicine Technology or the former American Medical Association Committee on Allied Health Education and Accreditation.

(c) "One contact hour" is considered to be 50 minutes lecture time or 100 minutes laboratory time;

(d) "One clinical year" is considered to be 1,900 contact hours;

(e) "One quarter credit hour" equals 11 contact hours; and

(f) "One semester credit hour" equals 16 contact hours.

(2) Clinical practice experience shall be supervised and verified by the approved clinical evaluators who must be:

(a) A radiologic technologist who provides direct supervision and is certified by the department in the specialty area for which the in-

dividual in the alternative training program is requesting certification; and

(b) A physician who provides indirect supervision. The physician supervisor shall routinely critique the films and evaluate the quality of the trainees' work((~~or~~)).

((~~e~~)) (3) The physician who is providing indirect supervision may also provide direct supervision, when a certified nuclear medicine technologist is not available, for individuals requesting to become certified as a nuclear medicine technologist.

AMENDATORY SECTION (Amending WSR 06-01-103, filed 12/21/05, effective 1/21/06)

**WAC 246-926-110 Diagnostic radiologic technologist—Alternative training.** ((An individual shall have the following alternative training qualifications to be certified as)) (1) Alternative training for a diagnostic radiologic technologist((~~or~~))

((1) Have obtained)) may be obtained with the following:

((a) (i) A high school diploma or GED equivalent((~~or~~ a minimum of three clinical years supervised practice experience in radiography, and completed the course content areas outlined in subsection (2) of this section; or have obtained an associate or higher degree in an allied health care profession or meets the requirements for certification as a therapeutic radiologic technologist or nuclear medicine technologist, have obtained a minimum of two clinical years supervised practice experience in radiography, and completed course content areas outlined in subsection (2) of this section.

((2) The following course content areas of training may be obtained directly by supervised clinical practice experience)):

((ii) Three clinical years supervised practice experience in radiography as provided in subsection (2) of this section; and

((iii) Completed course content as provided in subsection (3) of this section; or

((b) (i) An associate or higher degree in an allied health care profession; and

((ii) Two clinical years supervised practice experience in radiography as provided in subsection (2) of this section; and

((iii) Completed course content as provided in subsection (3) of this section; or

((c) (i) Meet the requirements of this chapter for certification as a therapeutic radiologic technologist or nuclear medicine technologist; and

((ii) Two clinical years supervised practice experience in radiography as provided in subsection (2) of this section; and

((iii) Completed course content as provided in subsection (3) of this section.

((2) Verified supervised clinical practice experience must include the following:

((a) Introduction to radiography((~~or~~)):

((b) Medical ethics and law((~~or~~)):

((c) Medical terminology((~~or~~)):

((d) Methods of patient care((~~or~~)):

((e) Radiographic procedures((~~or~~)):

(f) Radiographic film processing((~~7~~));  
(g) Evaluation of radiographs((~~7~~));  
(h) Radiographic pathology((~~7~~));  
(i) Introduction to quality assurance((~~7~~)); and  
(j) Introduction to computer literacy. ((Clinical practice experience must be verified by the approved clinical evaluators.

~~The following course content areas of training must be obtained through))~~

(3) Verified formal education must include the following:

(a) Human anatomy and physiology - 100 contact hours;  
(b) Principles of radiographic exposure - 45 contact hours;  
(c) Imaging equipment - 40 contact hours;  
(d) Radiation physics, principles of radiation protection, and principles of radiation biology - 40 contact hours; and  
(e) Sectional anatomy - 33 contact hours.

~~((3))~~ (4) Individuals participating in the diagnostic radiologic technologist alternative training program must annually report to the department ((of health radiologic technologist program)) the progress of their supervised clinical hours. Notification must be made in writing and must include the street and mailing address of their training program and the names of the individual's direct and indirect supervisors.

~~((4) Must pass an examination approved or administered by the secretary with a minimum scaled score of 75.~~

~~(5) Individuals who are registered as a diagnostic radiologic technologist with the American Registry of Radiologic Technologists shall be considered to have met the alternative education and training requirements.~~

~~((6))~~ (5) Individuals educated ((and/or)) or credentialed to practice as a diagnostic radiologic technologist in another country must provide official documentation of their education and training proving that they meet or exceed alternative training requirements. ((They must also pass an examination approved or administered by the secretary with a minimum scaled score of 75.))

(6) To meet the ARRT or NMTCB clinical experience requirements to sit for a computed tomography examination, a diagnostic radiologic technologist shall meet the following:

(a) Hold a current diagnostic radiologic technology certification issued by the secretary;

(b) Notify the department in writing of their intent to begin a training program for the purposes of meeting the clinical experience requirements for either the ARRT or NMTCB computed tomography examination, which must include:

(i) The street and mailing address of the training program;

(ii) The names of the designated training program supervisor or supervisors; and

(iii) The designated time frame within which the individual is working to qualify for a computed tomography examination;

(c) Report annually to the department the progress of their training including the number of clinical hours dedicated to computed tomography training and the number of computed tomography procedures performed and reported to either the ARRT or NMTCB; and

(d) Complete the clinical experience requirements within the time period set by the ARRT or NMTCB as reported under (b)(iii) of this subsection. If the individual does not meet the clinical experience requirements within the designated time period, the training program



is no longer valid and the individual must initiate a new training program.

AMENDATORY SECTION (Amending WSR 06-01-103, filed 12/21/05, effective 1/21/06)

**WAC 246-926-120 Therapeutic radiologic technologist—Alternative training.** ~~((An individual shall have the following alternative training qualifications to be certified as))~~ (1) Alternative training for a therapeutic radiologic technologist((—

~~(1) Have obtained)) may be obtained with the following:~~

~~(a) (i) A baccalaureate or associate degree in one of the physical, biological sciences, or allied health care professions((,—or meets)):~~

~~(ii) Three clinical years supervised practice experience in therapeutic radiologic technology as provided in subsection (2) of this section; and~~

~~(iii) Completed course content as provided in subsection (3) of this section; or~~

~~(b) (i) Meet the requirements of this chapter for certification as a diagnostic radiologic technologist or nuclear medicine technologist; ((have obtained a minimum of three clinical years supervised practice experience in therapeutic radiologic technology; and completed course content areas outlined in subsection (2) of this section.~~

~~(2) The following course content areas of training may be obtained by))~~

~~(ii) Three clinical years supervised practice experience in therapeutic radiologic technology as provided in subsection (3) of this section; and~~

~~(iii) Completed course content as provided in subsection (2) of this section.~~

~~(2) Verified supervised clinical practice experience, with at least 50 percent of the clinical practice experience in operating a linear accelerator, in the following:~~

~~(a) Orientation to radiation therapy technology((—)):~~

~~(b) Medical ethics and law((—)):~~

~~(c) Methods of patient care((—)):~~

~~(d) Computer applications((—)) and~~

~~(e) Medical terminology. ((At least fifty percent of the clinical practice experience must have been in operating a linear accelerator. Clinical practice experience must be verified by the approved clinical evaluators.~~

~~The following course content areas of training must be obtained through))~~

~~(3) Verified formal education in the following:~~

~~(a) Human anatomy and physiology - 100 contact hours;~~

~~(b) Oncologic pathology - 22 contact hours;~~

~~(c) Radiation oncology - 22 contact hours;~~

~~(d) Radiobiology, radiation protection, and radiographic imaging - 73 contact hours;~~

~~(e) Mathematics (college level algebra or above) - 55 contact hours;~~

~~(f) Radiation physics - 66 contact hours;~~

- (g) Radiation oncology technique - 77 contact hours;
- (h) Clinical dosimetry - 150 contact hours;
- (i) Quality assurance - 12 contact hours;
- (j) Hyperthermia - 4 contact hours; and
- (k) Sectional anatomy - 22 contact hours.

~~((3))~~ (4) Individuals participating in the therapeutic radiologic technologist alternative training program must annually report to the department ((of health radiologic technologist program)) the progress of their supervised clinical hours. Notification must be made in writing and must include the street and mailing address of their training program and the names of the individual's direct and indirect supervisors.

~~((4) Must pass an examination approved or administered by the secretary with a minimum scaled score of 75.~~

~~(5) Individuals who are registered as a therapeutic radiologic technologist by the American Registry of Radiologic Technologists shall be considered to have met the alternative education and training requirements.~~

~~(6)) (5) Individuals educated ((and/or)) or credentialed to practice as a therapeutic radiologic technologist in another country must provide official documentation of their education and training proving that they meet or exceed alternative training requirements. ((They must also pass an examination approved or administered by the secretary with a minimum scaled score of 75.))~~

(6) To meet the ARRT or NMTCB clinical experience requirements to sit for a computed tomography examination, a therapeutic radiologic technologist shall meet the following:

(a) Hold a current therapeutic radiologic technology certification issued by the secretary;

(b) Notify the department in writing of their intent to begin a training program for the purposes of meeting the clinical experience requirements for either the ARRT or NMTCB computed tomography examination, which must include:

(i) The street and mailing address of the training program;

(ii) The names of the designated training program supervisor or supervisors; and

(iii) The designated time frame within which the individual is working to qualify for a computed tomography examination;

(c) Report annually to the department the progress of their training including the number of clinical hours dedicated to computed tomography training and the number of computed tomography procedures performed and reported to either the ARRT or NMTCB; and

(d) Complete the clinical experience requirements within the time period set by the ARRT or NMTCB as reported under (b)(iii) of this subsection. If the individual does not meet the clinical experience requirements within the designated time period, the training program is no longer valid and the individual must initiate a new training program.

**WAC 246-926-130 Nuclear medicine technologist—Alternative training.** ~~((An individual shall have the following alternative training qualifications to be certified as))~~ (1) Alternative training for a nuclear medicine technologist((-

(1) Have obtained)) may be obtained with the following:

(a) (i) A baccalaureate or associate degree in one of the physical, biological sciences, or allied health care professions((-or meets)):

(ii) Two clinical years supervised practice experience in nuclear medicine technology as provided in subsection (2) of this section; and

(iii) Completed course content as provided in subsection (3) of this section; or

(b) (i) Meet the requirements of this chapter for certification as a diagnostic radiologic technologist or a therapeutic radiologic technologist; ((have obtained a minimum of two clinical years supervised practice experience in nuclear medicine technology; and completed course content areas outlined in subsection (2) of this section.

~~(2) The following course content areas of training may be obtained by))~~

(ii) Two clinical years supervised practice experience in nuclear medicine technology as provided in subsection (2) of this section; and

(iii) Completed course content as provided in subsection (3) of this section.

(2) Verified supervised clinical practice experience in the following:

(a) Methods of patient care((-)):

(b) Computer applications((-)):

(c) Department organization and function((-)):

(d) Nuclear medicine in vivo and in vitro procedures((-)): and

(e) Radionuclide therapy.

~~((Clinical practice experience must be verified by the approved clinical evaluators.~~

~~The following course content areas of training must be obtained through))~~

(3) Verified formal education in the following:

(a) Radiation safety and protection - 10 contact hours;

(b) Radiation biology - 10 contact hours;

(c) Nuclear medicine physics and radiation physics - 80 contact hours;

(d) Nuclear medicine instrumentation - 22 contact hours;

(e) Statistics - 10 contact hours; and

(f) Radionuclide chemistry and radiopharmacology - 22 contact hours.

~~((3))~~ (4) Individuals participating in the nuclear medicine technologist alternative training program must annually report to the department ((of health radiologic technologist program)) the progress of their supervised clinical hours. Notification must be made in writing and must include the street and mailing address of their training program and the names of the individual's direct and indirect supervisors.

~~((4) Must pass an examination approved or administered by the secretary with a minimum scaled score of 75.~~

~~(5) Individuals who are registered as a nuclear medicine technologist with the American Registry of Radiologic Technologists or with the Nuclear Medicine Technology Certification Board shall be considered to have met the alternative education and training requirements.~~

~~(6)) (5) Individuals educated ((and/or)) or credentialed to practice as a nuclear medicine technologist in another country must provide official documentation of their education and training proving that they meet or exceed alternative training requirements((. They must also pass an examination approved or administered by the secretary with a minimum scaled score of 75)) in this section.~~

(6) To meet the ARRT or NMTCB clinical experience requirements to sit for a computed tomography examination, a nuclear medicine technologist shall meet the following:

(a) Hold a current nuclear medicine technologist certification issued by the secretary;

(b) Notify the department in writing of their intent to begin a training program for the purposes of meeting the clinical experience requirements for either the ARRT or NMTCB computed tomography examination, which must include:

(i) The street and mailing address of the training program;

(ii) The names of the designated training program supervisor or supervisors; and

(iii) The designated time frame within which the individual is working to qualify for a computed tomography examination;

(c) Report annually to the department the progress of their training including the number of clinical hours dedicated to computed tomography training and the number of computed tomography procedures performed and reported to either the ARRT or NMTCB; and

(d) Complete the clinical experience requirements within the time period set by the ARRT or NMTCB as reported under (b)(iii) of this subsection. If the individual does not meet the clinical experience requirements within the designated time period, the training program is no longer valid and the individual must initiate a new training program.

## NEW SECTION

**WAC 246-926-135 Radiologic technologist—State examination/examination application deadline.** (1) The ARRT certification examinations for radiography, radiation therapy technology, and nuclear medicine technology are the state examinations for certification as a radiologic technologist.

(2) The examination shall be conducted in accordance with the ARRT security measures and contract.

(3) Applicants taking the state examination must submit the application, supporting documents, and fees to the department for approval prior to being scheduled to take the examination.

(4) Examination candidates shall be advised of the results of their examination in writing by the department.

(5) The examination candidate must have a minimum scaled score of 75 to pass the examination.

AMENDATORY SECTION (Amending WSR 10-10-043, filed 4/27/10, effective 5/28/10)

**WAC 246-926-150** ~~((Certification designation for diagnostic, therapeutic, or nuclear medicine radiologic technologists.))~~ Diagnostic radiologic, therapeutic radiologic, and nuclear medicine technologists—Certification designation. A certificate shall be designated in a particular field of radiologic technology by:

(1) The educational program completed; diagnostic radiologic technologist - radiography program; therapeutic radiologic technologist - radiation therapy technology program; and nuclear medicine technologist - nuclear medicine technology program; or

(2) By meeting the alternative training requirements established in WAC 246-926-100 and 246-926-110, 246-926-120, or 246-926-130.

NEW SECTION

**WAC 246-926-155** **Diagnostic radiologic, therapeutic radiologic, and nuclear medicine technologists—Clarification of scope of practice.**

The scope of practice for diagnostic, therapeutic, and nuclear medicine includes routine tasks such as patient positioning, providing instruction to patients about the imaging procedure, verifying informed consent, and documenting the imaging procedure and radiographic image in the patient's medical record. Radiographic images produced may be in physical form, such as an X-ray film, or in digital format. The clarification of scope of practice for each type of radiologic technologist is as follows:

(1) Diagnostic. The procedures a diagnostic radiologic technologist performs include, but are not limited to:

- (a) Standard radiographs or basic or conventional X-rays;
- (b) Bone densitometry scans or dual-energy X-ray absorptiometry or DEXA scans;
- (c) Mammography;
- (d) Fluoroscopic procedures;
- (e) Computed tomography or CT;
- (f) Cardiovascular-interventional radiography; or
- (g) Other imaging studies involving parenteral procedures, excluding those advanced imaging procedures identified in WAC 246-926-300.

Nothing in subsection (1) of this section shall be construed to require that a diagnostic radiologic technologist obtain national certification for computed tomography.

(2) Therapeutic. A therapeutic radiologic technologist is part of an interdisciplinary radiation therapy treatment team which may include, but is not limited to, radiologists, radiation oncologists, medical physicists, and nurses. A therapeutic radiologic technologist implements medical dosimetry treatment plans that include, but are not limited to:

- (a) The use of imaging technologies for simulation and treatment planning;

(b) The use of standard radiographs or CT to confirm or reconfirm position targets for precise treatment delivery;

(c) The fabrication, and use, of individualized immobilization devices that assist in precision treatment delivery;

(d) External beam radiation therapy or teletherapy, using methods such as:

(i) 3-dimensional conformal radiation therapy;

(ii) Intensity-modulated radiation therapy;

(iii) Image-guided radiation therapy;

(iv) Tomotherapy;

(v) Proton therapy; or

(vi) Other charged particle beams;

(e) Participation in the delivery of internal radiation therapy or brachytherapy, under the supervision of a radiation oncologist. However, a therapeutic radiologic technologist cannot perform invasive, surgical procedures;

(f) Systemic radiation therapy, which uses radioactive substances such as radioactive iodine;

(g) Palliative radiation therapy, which is used to treat pain from bone metastases;

(h) Dosimetry, under the supervision of a medical physicist to design, calculate, and generate effective radiation dose distributions; or

(i) Diagnostic CT, provided the therapeutic radiologic technologist has successfully passed a national certification examination in computed tomography administered by the ARRT or NMTCB.

(3) Nuclear medicine. A nuclear medicine technologist prepares, stores, administers, and disposes of radiopharmaceuticals, which includes sealed and unsealed radioactive materials, for diagnostic, treatment, and research purposes in compliance with radioactive materials laws and rules. The procedures performed at the direction of a licensed practitioner include, but are not limited to:

(a) Nuclear imaging tests such as:

(i) Positron-emission tomography or PET;

(ii) Single photon emission computed tomography or SPECT;

(iii) Fusion, hybrid, or simultaneous scanning that combines positron-emission tomography with:

(A) Computed tomography, or PET/CT; or

(B) Magnetic resonance imaging, or PET/MRI;

(iv) Fusion, hybrid, or simultaneous scanning that combines single photon emission computed tomography with:

(A) Computed tomography or SPECT/CT; or

(B) Magnetic resonance imaging or SPECT/MRI;

(v) Planar imaging or dynamic imaging procedures;

(b) Assists in exercise and pharmacologic cardiac testing procedures;

(c) Assists in the preparation, management, and application of radionuclide therapy treatment;

(d) Collection and labeling of tissue or body fluid samples;

(e) Managing and proper disposal of biohazardous, chemical, or radioactive waste materials following applicable federal and state laws;

(f) Diagnostic computed tomography, provided the nuclear medicine technologist has successfully passed a national certification examination in computed tomography administered by the NMTCB or ARRT.

## NEW SECTION

**WAC 246-926-165 Radiologic technologist—Military equivalency of certification requirements.** (1) The department accepts military education, training, or experience as described in subsections (4) through (8) of this section as meeting the corresponding education, training, or experience requirements.

(2) For the purposes of this section, these terms shall have the following meaning:

(a) "CAAHEP" means the Commission on Accreditation of Allied Health Education Programs and includes its prior organization, the Committee on Allied Health Education and Accreditation (CAHEA).

(b) "JRCCVT" means the Joint Review Committee on Education in Cardiovascular Technology.

(c) "JRCERT" means the Joint Review Committee on Education in Radiologic Technology.

(d) "JRCNMT" means the Joint Review Committee on Educational Programs in Nuclear Medicine Technology.

(e) "METC" means the Department of Defense, Defense Health Agency, Medical Education and Training Campus.

(3) Acceptable documentation to verify radiologic technology education, training, and experience for current or former U.S. Military service members includes:

(a) A copy of the service member's Certificate of Release or Discharge from Active Duty (DD Form 214, Member-4 copy; or NGB-22 for National Guard);

(b) Joint Service Transcript or JST/Sailor-Marine American Council on Education Registry Transcript or SMART;

(c) Army American Council of Education, or ACE, Registry Transcript System or AARTS;

(d) Application for the Evaluation of Learning Experiences During Military Service (DD Form 295) certified by the service member's service branch; or

(e) Any other military transcripts and forms that document the service member's military training and experience, such as the Community College of the Air Force or CCAF.

(4) For diagnostic radiologic technologists, the following are the acceptable military education, training, or experience:

(a)(i) The METC Tri Service Radiology program has been JRCERT accredited since 2011 and meets the school approval requirement in WAC 246-926-095;

(ii) Formal pre-METC U.S. Army, Navy, or Air Force radiologic technologist diagnostic-radiographer education programs have been determined by the department to meet the requirements in WAC 246-926-110;

(iii) Informal U.S. Army, Navy, or Air Force radiologic technologist diagnostic-radiographer education programs, such as U.S. Navy on-the-job training commonly referred to as "fast track," must meet all the requirements in WAC 246-926-110; or

(iv) The secretary will review U.S. Coast Guard education, training, and experience on a case-by-case basis to determine if training and scope of practice meets the requirements in WAC 246-926-110.

(b) All applicants applying under (a) of this subsection must provide proof of successful passage of the ARRT radiographer radiologic technologist examination or the Washington state examination iden-

tified in WAC 246-926-135, with the exception of those applicants who completed a pre-METC program that was accredited by the JRCERT at the time the applicant completed it.

(5) For therapeutic radiologic technologists, the following are the acceptable military education, training, or experience:

(a)(i) As of the effective date of this rule, METC does not offer a therapeutic radiologic technologist education program. Formal pre-METC U.S. Army, Navy, or Air Force therapeutic radiologic technologist education programs have been determined by the department to meet the requirements in WAC 246-926-120;

(ii) Informal U.S. Army, Navy, or Air Force therapeutic radiologic technologist education programs must meet all the requirements in WAC 246-926-120; or

(iii) The department will review U.S. Coast Guard education, training, and experience on a case-by-case basis to determine if training and scope of practice meets the requirements in WAC 246-926-120.

(b) All applicants applying under (a) of this subsection must provide proof of successful passage of the ARRT therapeutic radiologic technologist examination or the Washington state examination identified in WAC 246-926-135.

(6) For nuclear medicine technologists, the following are the acceptable military education, training, or experience:

(a)(i) As of the effective date of this rule, METC does not offer a JRCNMT accredited nuclear medicine technologist education program. Formal pre-METC U.S. Army, Navy, or Air Force radiologic technologist nuclear medicine programs completed from June 1, 1972, through August 31, 2012, meets the school approval requirement in WAC 246-926-095;

(ii) The METC nuclear medicine technologist education program is accredited by the ARRT. The department has determined this program meets the requirements in WAC 246-926-130;

(iii) Nonaccredited formal nuclear medicine education programs not identified in subsection (4)(a) of this section has been determined by the department to meet the requirements in WAC 246-926-130;

(iv) Informal U.S. Army, Navy, or Air Force radiologic technologist nuclear medicine education programs must meet all the requirements in WAC 246-926-130; or

(v) The department will review U.S. Coast Guard education, training, and experience on a case-by-case basis to determine if training and scope of practice meets the requirements in WAC 246-926-130.

(b) All applicants applying under (a) of this subsection must provide proof of successful passage of the NMTCB examination, the ARRT nuclear medicine technology examination, or the Washington state examination identified in WAC 246-926-135.

(7) For cardiovascular invasive specialists, the following are acceptable military education, training, or experience:

(a)(i) The METC cardiovascular technologist education program is CAAHEP accredited, which includes JRCCVT accreditation, and meets the school approval requirement in WAC 246-926-410. Formal pre-METC U.S. Army, Navy, or Air Force cardiovascular technologist education programs that were accredited by CAAHEP, which includes its prior organization CAHEA, also meet the school approval requirement in WAC 246-926-410;

(ii) Formal pre-METC U.S. Army, Navy, or Air Force cardiovascular technologist education programs that were not accredited by CAAHEP or CAHEA have been determined by the department to meet the requirements in WAC 246-926-410 (1)(a);



(iii) Informal U.S. Army, Navy, or Air Force cardiovascular technologist education programs, such as on-the-job U.S. Navy training commonly referred to as "fast track," must meet all the requirements in WAC 246-926-410 (1)(a) and (b); or

(b) The department will review U.S. Coast Guard education, training, and experience on a case-by-case basis to determine if training and scope of practice meets the requirements in WAC 246-926-410.

(c) All applicants applying under (a) of this subsection must provide proof of successful passage of an examination identified in WAC 246-926-410 (1)(b) or (2).

(8) Radiologist assistant. There is currently no radiologist assistant-equivalent occupation in the U.S. Army, Navy, Air Force, or Coast Guard. The department will review an individual's military training and experience record on a case-by-case basis; however, individuals who have obtained a passing score on the ARRT registered radiologist assistant examination shall be considered to have met the education and training requirements for certification as a radiologist assistant.

AMENDATORY SECTION (Amending WSR 15-24-093, filed 11/30/15, effective 12/31/15)

**WAC 246-926-180 Parenteral procedures.** (1) For the purposes of this section, these terms shall have the following meaning:

(a) ~~((("Diagnostic agent" means a substance used in radiologic technology to reveal, pinpoint, and define the localization of a pathological process, such as contrast preparations, radioactive isotopes, and dyes.~~

~~((b)))~~ "Parenteral administration" means introducing a substance or medication into the body in a manner other than through the digestive canal or by topical application.

~~((e)))~~ (b) "Therapeutic agent" means a medication or substance intended for medical treatment in the radiologic technology domain.

~~((d))~~ ~~"Venipuncture" means a procedure to puncture a vein to withdraw blood or to start intravenous infusion related to radiologic technology, but does not include the insertion of peripherally inserted central catheter (PICC) lines.))~~

(2) A certified ~~((diagnostic or therapeutic))~~ radiologic technologist may administer diagnostic and therapeutic agents consistent with their specific scope of practice via intravenous, intramuscular, or subcutaneous injection, under the direct supervision of a physician licensed under chapter 18.71 or 18.57 RCW. This includes accessing PICC lines and ports for manual or power injections for procedures related to radiologic technology. PICC lines and injection ports must be of a type approved by the federal Food and Drug Administration for administering diagnostic or therapeutic agents in radiologic technology. This does not include intraosseous infusion or intrathecal administration.

(3) Before the radiologic technologist may administer diagnostic and therapeutic agents, the following must be met:

(a) The radiologic technologist has had the prerequisite training and thorough knowledge of the particular procedure to be performed;

(b) Appropriate facilities are available for coping with any complication of the procedure as well as for emergency treatment of se-

vere reactions to the diagnostic or therapeutic agent itself, including readily available appropriate resuscitative drugs, equipment, and personnel; and

(c) After parenteral administration of a diagnostic or therapeutic agent, competent personnel and emergency facilities must be available to the patient for at least ~~((thirty))~~ 30 minutes in case of a delayed reaction.

(4) A cardiovascular invasive specialist may administer parenteral diagnostic and therapeutic agents during cardiac or vascular catheterization procedures under the personal supervision of a physician licensed under chapter 18.71 or 18.57 RCW. Parenteral administration includes, but is not limited to, catheterization procedures involving arteries and veins.

(5) A certified radiologic technologist or cardiovascular invasive specialist may perform venipuncture under the direct supervision of a physician licensed under chapter 18.71 or 18.57 RCW.

AMENDATORY SECTION (Amending WSR 10-10-043, filed 4/27/10, effective 5/28/10)

**WAC 246-926-300 Radiologist assistant scope of practice. (1)**

For the purposes of this section, "diagnostic agent" means a substance used in radiologic technology to reveal, pinpoint, and define the localization of a pathological process, such as contrast preparations, radioactive isotopes, and dyes.

(2) In addition to diagnostic radiologic technologist tasks in WAC 246-926-165, a radiologist assistant may perform advanced diagnostic imaging procedures under the direction of a supervising radiologist. Those procedures include, but are not limited to:

- (a) Enteral and parenteral procedures;
- (b) Injecting diagnostic agents to sites other than intravenous;
- (c) Diagnostic aspirations and localizations; and
- (d) Assisting radiologists with other invasive procedures.

~~((2))~~ (3) The tasks a radiologist assistant may perform include the following:

- (a) Preimaging procedures.
- (i) Procedures that may be performed under general supervision:

(A) Review of medical records to verify patient and procedure; obtain medical history and vital signs; perform physical examination, evaluate medical record, history, and physical examination for contraindications for the procedure ~~((e.g.,))~~ for compliance with preparation instructions for the procedure, pregnancy, medications~~((+))~~. Discrepancies ~~((and/or))~~ and contraindications must be reviewed with the supervising radiologist;

(B) Discuss ~~((examination/procedure))~~ examination and procedure details, ~~((+))~~ including risks, benefits, and follow-up instructions~~((+))~~ with patient or patient representative;

(C) Obtain informed consent, ~~((+))~~ patients must be able to communicate with the radiologist for questions or further information as needed~~((+))~~;

(D) Apply electrocardiography ~~((+ECG+))~~ or leads and recognize life threatening abnormalities;

(E) Routine urinary catheterization;

(F) Venipuncture;

- (G) Administer oxygen as prescribed; and
- (H) Position patients to perform required procedure, using immobilization devices and modifying technique as necessary.
- (ii) Procedures that may be performed under direct supervision: Nonroutine catheterization ((+)) for known anatomic anomalies, recent surgeries((+)).
- (b) Pharmaceuticals.
- (i) Imaging agent procedures that may be performed under general supervision:
  - (A) Monitor intravenous ((+))IV((+)) or flow rate; and
  - (B) Monitor patients for side effects or complications and report findings to the supervising radiologist as appropriate.
- (ii) Imaging contrast agent under direct supervision:
  - (A) Administer contrast agents ((~~and/or~~)) and radiopharmaceuticals as prescribed by the radiologist; and
  - (B) Provide information to patients on the effects and potential side effects of the pharmaceutical required for the examination.
- (iii) Oral medications, excluding imaging agents, always require direct supervision.
- (iv) Parenteral medication administration procedures, excluding imaging agents, requiring direct supervision:
  - (A) Monitor IV flow rate; and
  - (B) Monitor patients for side effects or complications and report findings to the supervising radiologist as appropriate.
- (v) Parenteral medication administration procedures, excluding imaging agents, requiring personal supervision:
  - (A) Administer general medications as prescribed by the radiologist;
  - (B) Administer conscious sedation medications as prescribed by the radiologist; and
  - (C) Provide information to patients on the effects and potential side effects of the pharmaceutical required for the examination.
- (c) Imaging procedures.
  - (i) Procedures that may be performed under general supervision:
    - (A) Operate a ((~~fixed/mobile~~)) fixed or mobile fluoroscopic unit;
    - (B) Document fluoroscopy time; and
    - (C) Assess patient's vital signs and level of anxiety ((~~and/or~~)) and pain, ((~~and~~)) inform the radiologist when appropriate.
  - (ii) Fluoroscopic examinations and procedures that require direct supervision:
    - (A) Upper GI;
    - (B) Esophagus;
    - (C) Small bowel studies;
    - (D) Barium enema;
    - (E) Cystogram, including voiding cystourethrogram or VCUG;
    - (F) T-tube cholangiogram;
    - (G) Hysterosalpingogram ((+)) for imaging only((+)) if OB/GYN is present in the room;
    - (H) Retrograde urethrogram;
    - (I) Nasoenteric and oroenteric feeding tube placement;
    - (J) Port injection;
    - (K) Fistulogram/sonogram;
    - (L) Loopogram; and
    - (M) Swallowing study.
  - (iii) Fluoroscopic examinations and procedures that require personal supervision: Hysterosalpingogram ((+)) for imaging only((+)) if OB/GYN is not present in the room.

(iv) Contrast media administration and needle or catheter placement.

(A) Procedures that may be performed under general supervision:  
 Basic ~~((peripherally inserted central catheter-()))~~ PICC(~~(+)~~) placement.

(B) Procedures that may be performed under direct supervision:

- (I) Joint injection and aspiration;
- (II) Arthrogram (~~((+))~~ for conventional, ~~((computed tomography-CT))~~ CT, and magnetic resonance ~~((MR-))~~);
- (III) Complex ~~((peripherally inserted central catheter-()))~~ PICC(~~(+)~~) placement;
- (IV) Thoracentesis and paracentesis with appropriate image guidance; ~~((and))~~
- (V) Lower extremity venography;
- (VI) Lumbar puncture under fluoroscopic guidance; and
- (VII) Lumbar, thoracic, and cervical myelogram.

(C) Procedures that may be performed under personal supervision:

- (I) ~~((Lumbar puncture under fluoroscopic guidance;~~
- ~~(II) Lumbar, thoracic, and cervical myelogram;~~
- ~~(III))~~ Nontunneled venous central line placement;
- ~~((IV))~~ (II) Venous catheter placement for dialysis;
- ~~((V))~~ (III) Breast needle localization; and
- ~~((VI))~~ (IV) Ductogram (galactogram).

(d) Image review, requires general supervision:

- (i) Evaluate images for completeness and diagnostic quality;
- (ii) Recommend additional images in the same modality as required ~~((+))~~ for general radiography, CT, ~~((MR-))~~ or magnetic resonance;
- (iii) Evaluate images for diagnostic utility and report clinical observations to the radiologist;
- (iv) Review imaging procedures, make initial observations, and communicate observations only to the radiologist; and
- (v) Perform post-processing procedures:

- (A) Routine CT ~~((e.g.,))~~ for 3D reconstruction, modifications to field of vision ~~((FOV-))~~, slice spacing, or algorithm(~~(+)~~);
- (B) Specialized CT ~~((e.g.,))~~ for cardiac scoring(~~(r)~~) or shunt graft measurements(~~(+)~~); and
- (C) ~~((MR))~~ Magnetic resonance data analysis ~~((e.g.,))~~ for 3D reconstructions, maximum intensity projection ~~((MIP-))~~, 3D surface rendering, or volume rendering(~~(+)~~).

(e) Postprocedures, requires general supervision:

- (i) Record previously communicated initial observations of imaging procedures according to approved protocols;
- (ii) Communicate radiologist's report to referring physician;
- (iii) Provide radiologist-prescribed post care instructions to patients;
- (iv) Perform follow-up patient evaluation and communicate findings to the radiologist;
- (v) Document procedure in appropriate record and document exceptions from established protocol or procedure; and
- (vi) Write patient discharge summary for review and cosignature by radiologist.

(f) Other procedures.

- (i) Procedures that may be performed under general supervision:

- (A) Participate in quality improvement activities within radiology practice ~~((e.g.,))~~ for quality of care, patient flow, reject-repeat analysis, or patient satisfaction(~~(+)~~); and

(B) Assist with data collection and review for clinical trials or other research.

(ii) Procedures that may be performed under personal supervision: Additional procedures deemed appropriate by the radiologist.

(g) When performing any task or procedure, the radiologist assistant must be able to recognize and respond to medical emergencies ~~((e.g.,))~~ for drug reactions, cardiac arrest, or hypoglycemia~~((?))~~; and activate emergency response systems, including notification of the radiologist.

~~((3))~~ (4) Initial findings and observations made by a radiologist assistant communicated solely to the supervising radiologist do not constitute diagnoses or interpretations.

~~((4))~~ (5) At the direction of the supervising radiologist, a radiologist assistant may administer imaging agents and prescribed medications; however, nothing in this chapter allows a radiologist assistant to prescribe medications.

AMENDATORY SECTION (Amending WSR 17-18-100, filed 9/6/17, effective 10/7/17)

**WAC 246-926-310** ~~((What are the requirements to be certified as a radiologist assistant?))~~ **Radiologist assistant—Certification.** ~~((1) Individuals wanting to be certified))~~ To obtain certification as a radiologist assistant, an applicant must submit:

~~((a) Graduate from an educational program recognized by the ARRT;~~

~~(b) Obtain a passing score on the national ARRT registered radiologist assistant examination; and~~

~~(c) Submit the application, supporting documents, and fees to the department of health.~~

~~(2) An individual certified as a radiologist practitioner assistant through the certification board of radiology practitioner assistants who takes and passes the national ARRT registered radiologist assistant examination by December 31, 2011, shall be considered to have met the education and examination requirements for certification as a radiologist assistant.~~

~~(3) Military education, training, and experience may meet certification requirements as outlined in WAC 246-926-145))~~ (1) A completed application on forms provided by the secretary;

(2) Proof of successfully passing an examination in radiologist assistant administered by ARRT;

(3) Proof of completed education in one of the following:

(a) Graduate from an education program recognized by ARRT;

(b) Military education, training, and experience listed in WAC 246-926-155; or

(c) Hold a radiologist practitioner assistant certification with the certification board of radiology practitioner assistants by passing the national ARRT registered radiologist assistant examination;

(4) Written verification of any licenses held, submitted directly from that licensing entity;

(5) Applicable fees defined in WAC 246-926-990; and

(6) Any other information determined by the secretary.

**WAC 246-926-400 Cardiovascular invasive specialist scope of practice.** (1) A cardiovascular invasive specialist assists in cardiac or vascular catheterization procedures in the role of either:

(a) A monitoring technologist, who documents every action during a catheterization procedure and monitors the patient's status, reporting any irregularities to the surgical team;

(b) A circulating technologist, who provides assistance to the surgical team from outside the sterile field; or

(c) A sterile/scrub technologist, who directly assists the physician during the catheterization procedure.

Except as provided in subsection (8) of this section, no cardiovascular invasive specialist shall perform the tasks of more than one role during any individual procedure. All intraprocedure tasks in any role must be performed under personal supervision.

(2) The preprocedure tasks a cardiovascular invasive specialist may perform in any role include:

(a) Prepare sterile table and necessary supplies;

(b) Verify patient identification;

(c) Verify or facilitate patient consent;

(d) Verify history and physical information to include:

(i) Chief complaint;

(ii) History of present illness;

(iii) Current medications;

(iv) Laboratory results;

(v) Test reports, as necessary, such as X-rays (~~((and/or))~~) and electrocardiograms (~~((ECG))~~);

(vi) Past medical history;

(vii) Family and social history; and

(e) Obtain blood samples as allowed under WAC 246-926-180(3).

(3) The intraprocedure and post-procedure tasks a cardiovascular invasive specialist may perform in the role of a monitoring technologist include:

(a) Operate physiologic monitoring and recording equipment;

(b) Capture and input data for procedural calculations;

(c) Monitor, identify, measure, and record information from electrocardiograms (~~((+))~~) or ECG(~~((+))~~), intracardiac electrograms, and pressure waveforms;

(d) Document each step and action during a procedure; and

(e) Inform the physician and team members of noted abnormalities.

(4) The intraprocedure tasks a cardiovascular invasive specialist may perform in the role of a (~~((sterile/scrub))~~) sterile or scrub technologist include:

(a) Administer local anesthetic as allowed under WAC 246-926-180;

(b) Gain (~~((arterial/venous))~~) arterial or venous access;

(c) Insert and flush vascular sheath;

(d) Assist with insertion and manipulation of guidewires, catheters, and pacing leads;

(e) Assist with implantation of leads and devices for implantable devices, such as pacemakers or implantable cardioverter-defibrillators (~~((+))~~) or ICDs(~~((+))~~);

(f) Close implantable device pockets;

(g) Assist in ablation of intracardiac lesions;

(h) Assist with performing intracardiac mapping;

- (i) Assist with performing intracardiac lead extraction;
- (j) Assist with obtaining invasive hemodynamic data, cardiac outputs, and blood samples;
- (k) Inject contrast as allowed under WAC 246-926-180 for visualizing cardiovascular anatomical structures either manually or with the aid of a mechanical contrast device;
- (l) Administer medications related to cardiac or vascular catheterization as directed by the physician;
- (m) Assist with obtaining tissue samples for biopsy; and
- (n) Operate intravascular ((~~ultrasound/intracardiac~~)) ultrasound or intracardiac echocardiography ((~~IVUS/ICE~~)), fluoroscopy, and other imaging modalities excluding computed tomography as defined in WAC 246-226-010(1).

(5) The intraprocedure tasks a cardiovascular invasive specialist may perform in the role of a circulating technologist include:

- (a) Maintain sterile field and equipment supply;
- (b) Set-up and operate ancillary equipment to include:
  - (i) Contrast injectors;
  - (ii) IVUS/ICE;
  - (iii) Fractional flow reserve/coronary flow reserve (FFR/CFR);
  - (iv) Atherectomy/thrombectomy devices and consoles;
  - (v) Intra-aortic balloon pump;
  - (vi) Percutaneous ventricular assist devices;
  - (vii) Pacemakers, automated implantable cardioverter defibrillators (AICD), and temporary pacemakers;
  - (viii) Pacemaker and AICD programmers;
  - (ix) Ablation devices;
  - (x) Intracardiac mapping devices;
  - (xi) Lead extraction devices;
  - (xii) Electrophysiologic stimulators;
  - (xiii) Other diagnostic, interventional, and mechanical support devices;
- (xiv) Activated coagulation time (ACT) and other coagulation studies;
- (xv) Whole blood oximetry; and
- (xvi) Arterial blood gas (ABG).

(6) The post-procedure access site tasks a cardiovascular invasive specialist may perform in the role of either circulating technologist or sterile/scrub technologist include the following:

- (a) Manually remove vascular sheath/catheter;
- (b) Secure retained sheath/catheter;
- (c) Use compression devices;
- (d) Use vascular closure devices; and
- (e) Instruct patient on care of site.

(7) The post-procedure patient care tasks a cardiovascular invasive specialist may perform in any role include the following:

(a) Monitor and assess patient ((~~ECG, vital signs~~)) heart rate, blood pressure, respiratory rate, oxygen saturation, and level of consciousness;

(b) Identify, monitor, and compress rebleeds ((~~and/or~~)) and hematomas;

- (c) Assess distal pulses; and
- (d) Document patient chart as appropriate.

(8) On an individual case basis and at the sole discretion of the physician, a cardiovascular invasive specialist may assume the dual role of monitoring and circulating technologist during an individual

procedure. Such dual role approval shall be documented in the patient chart.

(9) Nothing in this chapter shall be interpreted to alter the scope of practice of any other credentialed health profession or to limit the ability of any other credentialed health professional to assist in cardiac or vascular catheterization if such assistance is within the profession's scope of practice.

AMENDATORY SECTION (Amending WSR 17-18-100, filed 9/6/17, effective 10/7/17)

**WAC 246-926-410 ((Requirements for)) Cardiovascular invasive specialist certification.** ~~((1) Applicants for))~~ To obtain certification as a cardiovascular invasive specialist, the applicant must ~~((meet the following requirements))~~ submit:

~~((a) Graduate))~~ (1) A completed application on forms provided by the secretary;

(2) Proof of completed education in one of the following:

(a) Graduation from an educational program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) utilizing the standards and criteria established by the Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT); ~~((and~~

~~(b) Obtain a passing score on the national Registered Cardiovascular Invasive Specialist (RCIS) examination administered by Cardiovascular Credentialing International (CCI).~~

~~(2) Individuals who have been certified or registered))~~ or

(b) Military education, training, and experience listed in WAC 246-926-155; or

(c) Hold certification or registration with one of the following national organizations ~~((shall be considered to have met the education and training requirements))~~:

~~((a) CCI))~~ (i) Cardiovascular Credentialing International through the ((RCIS)) Registered Cardiovascular Invasive Specialist examination, formerly the Registered Cardiovascular Technologist examination or the Certified Cardiovascular Technologist examination; or

~~((b) CCI))~~ (ii) Cardiovascular Credentialing International through the Registered Cardiac Electrophysiology Specialist ((RCES)) examination; or

~~((c))~~ (iii) Heart Rhythm Society ((HRS)) through the International Board of Heart Rhythm Examiners ((IBHRE)), formerly the North American Society of Pacing and Electrophysiology ((NASPE)) examination; or

~~((d))~~ (iv) ARRT through the Cardiac Interventional Radiographer ((RTR-CI)) post-primary examination, the Vascular Interventional Radiographer ((RTR-VI)) post-primary examination, or the Cardiovascular Interventional Radiographer ((RTR-CV)) post-primary examination((-));

(3) ((Military education, training, and experience may meet certification requirements as outlined in WAC 246-926-145.)) Proof of successfully passing the national Registered Cardiovascular Invasive Specialist examination administered by Cardiovascular Credentialing International;

(4) Written verification of any licenses held, submitted directly from that licensing entity;



- (5) Applicable fees defined in WAC 246-926-990; and
- (6) Any other information determined by the secretary.

#### NEW SECTION

**WAC 246-926-500 X-ray technician registration requirements.** To obtain registration as an X-ray technician an applicant must submit:

- (1) An completed application on forms provided by the secretary;
- (2) Written verification of any licenses held, submitted directly from that licensing entity;
- (3) Applicable fees as defined in WAC 246-926-990; and
- (4) Any other information determined by the secretary.

#### NEW SECTION

**WAC 246-926-510 X-ray technician—Competency requirements and authorized duties.** (1) A registered X-ray technician operating X-ray equipment shall meet the competency requirements in WAC 246-225-99920 to produce radiographic images in physical form, such as X-ray film.

(2) The authorized duties a registered X-ray technician may perform under the direction of a licensed practitioner are:

- (a) Standard radiographs or basic or conventional X-rays; and
- (b) Bone densitometry scans or dual-energy X-ray absorptiometry or DEXA scans.

(3) Procedures a registered X-ray technician cannot perform include, but are not limited to:

- (a) Any imaging procedure that involves parenteral procedures;
- (b) Any procedures identified in:
  - (i) WAC 246-926-300;
  - (ii) WAC 246-926-400;
  - (iii) WAC 246-926-165, other than those procedures identified in this section as being allowed; and
- (c) Mammography, in accordance with 21 C.F.R. Sec. 900.12(2).

#### NEW SECTION

**WAC 246-926-600 Expired certifications and registrations.** (1) If the license has expired for three years or less, the practitioner must meet the requirements of WAC 246-12-040.

(2) If the license has expired for over three years, the practitioner must:

- (a) Demonstrate competence to the standards established by the secretary; and
- (b) Meet the requirements of WAC 246-12-040.

## REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 246-926-040	Health care institutions.
WAC 246-926-050	Radiological technologist associations or societies.
WAC 246-926-060	Professional liability carriers.
WAC 246-926-070	Courts.
WAC 246-926-080	State and federal agencies.
WAC 246-926-090	Cooperation with investigation.
WAC 246-926-140	Approved schools for diagnostic, therapeutic, or nuclear medicine radiologic technologists.
WAC 246-926-145	Military equivalency.
WAC 246-926-170	Expired license.
WAC 246-926-190	State examination/examination waiver/examination application deadline for diagnostic, therapeutic, or nuclear medicine radiologic technologists.