

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) "Department" means the department of health.

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

(a) For a diagnostic, therapeutic, 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) "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.)~~) "Licensed practitioner" means a licensed health care practitioner performing the services within the person's authorized scope of practice.

(7) (~~("Nursing home" means any health care institution which comes under chapter 18.51 RCW.)~~) "NMTCB" means the nuclear medicine technology certification board.

(8) "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 technologist" means a person certified under chapter 18.84 RCW.

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

(12) "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.)~~)

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 radiological 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 shall always report in compliance with the uniform mandatory reporting rules found in WAC 246-16-200 through 246-16-270.

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

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

~~((1))~~ (a) Have obtained a high school diploma or GED equivalent, a minimum of three clinical years supervised practice experience in radiography, and completed the course content areas ~~((outlined in subsection (2))~~ in (b) of this ~~((section))~~ subsection; 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))~~ in (b) of this ~~((section))~~ subsection.

~~((2))~~ (b) The following course content areas of training may be obtained directly by supervised clinical practice experience: Introduction to radiography, medical ethics and law, medical terminology,

methods of patient care, radiographic procedures, radiographic film processing, evaluation of radiographs, radiographic pathology, introduction to quality assurance, and 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 formal education: Human anatomy and physiology - 100 contact hours; principles of radiographic exposure - 45 contact hours; imaging equipment - 40 contact hours; radiation physics, principles of radiation protection, and principles of radiation biology - 40 contact hours; and sectional anatomy - 33 contact hours.

~~((3))~~ (c) 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 program and the names of the individual's direct and indirect supervisors.

~~((4))~~ (d) 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))~~ (e) Individuals educated and/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.

(2) 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 program;

(ii) The names of the designated 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 radiologic technology program 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 246-926-120 Therapeutic radiologic technologist—Alternative training. (1) An individual shall have the following alternative training qualifications to be certified as a therapeutic radiologic technologist.

~~((1))~~ (a) Have obtained a baccalaureate or associate degree in one of the physical, biological sciences, or allied health care professions, or meets the requirements 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)))~~ in (b) of this ((section)) subsection.

~~((2))~~ (b) The following course content areas of training may be obtained by supervised clinical practice experience: Orientation to radiation therapy technology, medical ethics and law, methods of patient care, computer applications, and medical terminology. At least ~~((fifty))~~ 50 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 formal education: Human anatomy and physiology - 100 contact hours; oncologic pathology - 22 contact hours; radiation oncology - 22 contact hours; radiobiology, radiation protection, and radiographic imaging - 73 contact hours; mathematics (college level algebra or above) - 55 contact hours; radiation physics - 66 contact hours; radiation oncology technique - 77 contact hours; clinical dosimetry - 150 contact hours; quality assurance - 12 contact hours; hyperthermia - 4 contact hours; and sectional anatomy - 22 contact hours.

~~((3))~~ (c) 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 program and the names of the individual's direct and indirect supervisors.

~~((4))~~ (d) 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))~~ (e) Individuals educated and/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.

(2) 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 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 program;

(ii) The names of the designated 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 radiologic technology program 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 246-926-130 Nuclear medicine technologist—Alternative training. (1) An individual shall have the following alternative training qualifications to be certified as a nuclear medicine technologist.

~~((1))~~ (a) Have obtained a baccalaureate or associate degree in one of the physical, biological sciences, allied health care professions, or meets the requirements 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))~~ in (b) of this ~~((section))~~ subsection.

~~((2))~~ (b) The following course content areas of training may be obtained by supervised clinical practice experience: Methods of patient care, computer applications, department organization and function, nuclear medicine in vivo and in vitro procedures, and radionuclide therapy. Clinical practice experience must be verified by the approved clinical evaluators.

The following course content areas of training must be obtained through formal education: Radiation safety and protection - 10 contact hours; radiation biology - 10 contact hours; nuclear medicine physics and radiation physics - 80 contact hours; nuclear medicine instrumentation - 22 contact hours; statistics - 10 contact hours; radionuclide chemistry and radiopharmacology - 22 contact hours.

~~((3))~~ (c) 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 program and the names of the individual's direct and indirect supervisors.

~~((4))~~ (d) 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))~~ (e) Individuals educated and/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.

(2) 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 nuclear medicine 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 program;

(ii) The names of the designated 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 radiologic technology program 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 Requirements for certification as a radiologic technologist. (1) To qualify for certification as a diagnostic radiologic technologist, an individual must:

(a) Successfully pass an examination in radiography administered by the ARRT; or

(b) Complete 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.

(2) To qualify for certification as a therapeutic radiologic technologist, an individual must:

(a) Successfully pass an examination in radiation therapy technology administered by the ARRT; or

(b) Complete 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.

(3) To qualify for certification as a nuclear medicine radiologic technologist, an individual must:

(a) Successfully pass an examination in nuclear medicine administered by either the NMTCB or the ARRT; or

(b) Complete 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.

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

WAC 246-926-145 Military equivalency. (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) "ARRT" has the same meaning as WAC 246-926-020(1).

(b) "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).

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

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

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

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

(g) "NMTCB" (~~means the Nuclear Medicine Technology Certification Board~~) has the same meaning as WAC 246-926-020(7).

(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-radiographer 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 246-926-140;

(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 identified in WAC 246-926-190, 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-radiation therapy 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 246-926-190.

(6) For nuclear medicine 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 JRCNMT accredited nuclear medicine radiologic 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 246-926-140;

(ii) The METC nuclear medicine radiologic 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 radiologic technologist examination, or the Washington state examination identified in WAC 246-926-190.

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

(a)(i) The METC cardiovascular technologist 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.

(c) "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 severe 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) In addition to diagnostic radiologic technologist tasks, 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) 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., compliance with preparation instructions for the procedure, pregnancy, medications). Discrepancies and/or contraindications must be reviewed with the supervising radiologist;
 - (B) Discuss examination/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) 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 (known anatomic anomalies, recent surgeries).
 - (b) Pharmaceuticals.
 - (i) Imaging agent procedures that may be performed under general supervision:
 - (A) Monitor intravenous (IV) 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 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 fluoroscopic unit;
 - (B) Document fluoroscopy time; and
 - (C) Assess patient's vital signs and level of anxiety and/or 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, also known as VCUG;
 - (F) T-tube cholangiogram;
 - (G) Hysterosalpingogram (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 (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 (conventional, computed tomography (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.
 - (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) Venous catheter placement for dialysis;
 - (V) Breast needle localization; and
 - (VI) 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 (general radiography, CT, MR);
 - (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., 3D reconstruction, modifications to field of vision (FOV), slice spacing, algorithm);
 - (B) Specialized CT (e.g., cardiac scoring, shunt graft measurements); and
 - (C) MR data analysis (e.g., 3D reconstructions, maximum intensity projection (MIP), 3D surface rendering, 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., quality of care, patient flow, reject-repeat analysis, 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., drug reactions, cardiac arrest, hypoglycemia) and activate emergency response systems, including notification of the radiologist.
- (3) Initial findings and observations made by a radiologist assistant communicated solely to the supervising radiologist do not constitute diagnoses or interpretations.
- (4) 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)) for certification as a radiologist assistant? (1) Individuals wanting to be certified as a radiologist assistant must:

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

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

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

(2) ~~((An))~~ Individuals certified as a radiologist practitioner assistant, also known as an RPA, through the certification board of radiology practitioner assistants who takes and passes the national ARRT registered radiologist assistant examination by December 31, ~~((2011))~~ 2020, 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.

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 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 (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 technologist include:

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

(b) Gain arterial/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 (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 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, and level of consciousness;
 - (b) Identify, monitor, and compress rebleeds and/or 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 as-

sist 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 certification as a cardiovascular invasive specialist must meet the following requirements:

(a) Graduate 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 with one of the following national organizations shall be considered to have met the education and training requirements:

(a) CCI through the RCIS examination, formerly the Registered Cardiovascular Technologist (RCVT) examination or the Certified Cardiovascular Technologist (CCVT) examination;

(b) CCI through the Registered Cardiac Electrophysiology Specialist (RCES) examination;

(c) 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) 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.

NEW SECTION

WAC 246-926-500 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, also known as basic or conventional X-rays; and

(b) Bone densitometry scans, also known as 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 246-926-510, 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 246-926-510 Radiologic technologist—Clarification of scope of practice. The three types of radiologic technologists are diagnostic, therapeutic, and nuclear medicine. The scope of practice for each type 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, also known as basic or conventional X-rays;
 - (b) Bone densitometry scans, also known as dual-energy X-ray absorptiometry or DEXA scans;
 - (c) Mammography;
 - (d) Fluoroscopic procedures;
 - (e) Computed tomography, also known as 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 computed tomography 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, also known as 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, also known as 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 computed tomography, 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 radiologic 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, also known as PET;
 - (ii) Single photon emission computed tomography, also known as SPECT;
 - (iii) Fusion, hybrid, or simultaneous scanning that combines positron-emission tomography with:
 - (A) Computed tomography, known as PET/CT; or
 - (B) Magnetic resonance imaging, known as PET/MRI;
 - (iv) Fusion, hybrid, or simultaneous scanning that combines single photon emission computed tomography with:
 - (A) Computed tomography, known as SPECT/CT; or
 - (B) Magnetic resonance imaging, known as SPECT/MRI;
 - (v) Plane R 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.

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.