California Code of Regulations
Title 17. Public Health
Division 1. Department of Health Services
Chapter 5. Sanitation
Subchapter 4. Radiation
Group 3. Standards for Protection Against Radiation
Article 1. General

Amend Section 30252 to read as follows:

§ 30252. Scope and Purpose.

No change to text.

Note: Authority cited: Sections 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

Note: Authority cited: Sections 114975, 115000 and 131200, Health and Safety Code. Reference: Sections 114965, 114970, 115000, 115060, 131050, 131051 and 131052, Health and Safety Code.

Article 4. Special Requirements for the Use of X-Ray in the Healing Arts

Adopt section 30305.5 within Article 4 of Group 3 of Subchapter 4 to read as follows:

§ 30305.5. Radiologic Technology Act Compliance and Movement of Patient or Equipment During X-ray Procedures Using Fluoroscopy.

- (a) A user shall assure that all persons under his or her jurisdiction that are operating or supervising the operation of X-ray equipment for purposes of radiologic technology, as defined in section 30400, comply with the Radiologic Technology Act (RT Act) (Health & Safety Code section 27) and the regulations adopted pursuant to the RT Act (commencing at section 30400 of Subchapter 4.5). For purposes of this section, the following terms apply:
 - (1) "Non-permitted individual" means a person who is:
 - (A) Not certified or permitted pursuant to the RT Act; or
- (B) A CRT who does not hold a radiologic technologist fluoroscopy (RTF) permit issued pursuant to section 30451, an XT, or a certified supervisor and operator (S&O) who does not hold a fluoroscopy S&O permit issued pursuant to section 30466. The

- terms "CRT," "XT," and "certified supervisor and operator" are as defined in section 30400.
 - (2) "Patient" means a living human being exposed to X-ray for medical treatment.
- (b) A user may allow a non-permitted individual, during use of fluoroscopy X-ray equipment on a patient while the equipment is not emitting X-rays, to move the patient or fluoroscopy X-ray equipment when all of the following conditions exist:
- (1) A certified S&O holding either a radiology S&O certificate or fluoroscopy S&O permit, issued pursuant to section 30466:
- (A) Is physically present in the room personally directing the actions of the nonpermitted individual;
- (B) Establishes or, after any movement of the patient or equipment, reestablishes the spatial relationship between the patient and the equipment; and
- (C) Assesses or reassess the exposure technique and radiation safety consequences prior to initiation of or any subsequent radiation exposure to the patient; and
- (2) The non-permitted individual does not actuate or energize the equipment to emit radiation or select the equipment's technique factors (e.g. kVp, mA) or mode of operation such as normal fluoroscopy (analog or digital), high-level control fluoroscopy, cineradiography (analog or digital), digital subtraction, electronic radiography using the fluoroscopic image receptor, and photospot recording, or adjust other system variables such as image magnification, X-ray field size, pulse modes, or optical aperture that affect a patient's radiation exposure.
- (c) A user may allow a non-permitted individual, during use of fluoroscopy X-ray equipment on a patient while the equipment is emitting radiation exposing the patient, for the purpose of manipulating the patient if required for the procedure, to move the patient, or for the purpose of re-centering the equipment to the area of clinical interest, to move the equipment when all of the following conditions exist:
- (1) A certified S&O holding either a radiology S&O certificate or fluoroscopy S&O permit is physically present in the room personally directing the non-permitted individual to perform the actions;

- (2) Either a certified diagnostic radiologic technologist (RT), as defined in section 30400, holding a RTF permit issued pursuant to section 30451 or physician assistant (PA) holding a PA fluoroscopy (PAF) permit issued pursuant to section 30456.2 is physically present in the procedure room managing the patient's radiation exposure and actions of the non-permitted individual. Subject to the certified S&O's judgement, the RT or PA may stop the non-permitted individual from performing the actions and personally perform the actions if the RT or PA determines the use is unsafe or would unnecessarily increase the patient's radiation exposure;
- (3) Prior to performing the actions, the non-permitted individual has completed the training specified in subsection (d) within the previous 12 months; and
 - (4) The non-permitted individual does not:
 - (A) Actuate or energize the fluoroscopy equipment to emit radiation;
- (B) Select the equipment's technique factors (e.g. kVp, mA) or mode of operation such as normal fluoroscopy (analog or digital), high-level control fluoroscopy, cineradiography (analog or digital), digital subtraction angiography, electronic radiography using the fluoroscopic image receptor, or photospot recording, or adjust other system variables such as image magnification, X-ray field size (e.g. collimating), pulse modes (e.g. rate, duration), or optical aperture that affect a patient's radiation exposure; or
- (C) Move the table or C-arm (i.e. equipment component on which the X-ray source and image receptor are connected) while radiation is continuously being emitted so as to continually observe the movement of guidewires, catheters or other radiopaque objects being introduced into or advanced through, or withdrawn from the patient (e.g. following the movement of a guidewire from insertion to the coronary arteries), movement of contrast material through vessels (e.g. panning), or for any other purpose other than those purposes specified in subsection (c).
- (d) A user implementing subsection (c) shall ensure the non-permitted individual has satisfactorily completed instruction in the subject areas identified in paragraphs (1) through (5). This instruction shall be no less than 120 minutes in length, and be provided by a RTF or PAF permit holder, a holder of a radiology S&O certificate or

fluoroscopy S&O permit, or an individual (such as a diagnostic medical physicist) deemed qualified to teach the instruction by holding academic or professional credentials appropriate to the instruction content, and being knowledgeable of educational instruction, evaluation, and the equipment to be used by the non-permitted individual. The instruction shall be provided to the non-permitted individual at intervals not to exceed 12 months. An individual meeting the criteria of subsection (a)(1)(B), for both the initial instruction and the 12-month re-instruction, need not meet the instruction specified in paragraphs (2), (3) and (5) provided the individual's certificate or permit issued pursuant to the RT Act is current and valid and the instruction length for paragraphs (1) and (4) is no less than one hour:

- (1) Equipment set up and hands-on manipulation of the equipment by the prospective non-permitted individual and demonstration that they are able to safely set up and move or manipulate the equipment for the purposes specified in subsection (c). This equipment shall be the same equipment that the individual would be directed to move or manipulate for purposes of subsection (c). Exposure of human beings to X-ray is prohibited;
- (2) Fundamentals of radiation protection including methods of controlling radiation dose to the patient, self and others: time, distance, shielding;
- (3) Significance of radiation dose, to include hazards of excessive exposure to radiation, biological effects of radiation dose, and radiation protection standards;
 - (4) Expected levels of radiation from fluoroscopy equipment; and
 - (5) Characteristics and use of personnel monitoring equipment.
- (e) If applicable, the user shall maintain for Department inspection documentation demonstrating compliance with subsection (d). This documentation shall include the following:
 - (1) Name of the individual and signature or initials of the individual;
 - (2) Date of the training;
- (3) Instructor's name and documentation demonstrating the instructor meets the criteria specified in subsection (d); and

- (4) Written and signed attestation by the instructor that the individual has satisfactorily completed the training and demonstrated they are able to competently and safely move or manipulate the fluoroscopy X-ray equipment for the purposes specified in subsection (c).
- (f) Nothing in this section may be construed to authorize a non-permitted individual to perform tasks subject to the RT Act other than as specified in subsection (b) or (c), or to apply X-ray to a human being. For non-permitted individuals meeting subsection (a)(1)(B), this subsection may not be construed to affect any rights, responsibilities, obligations, exclusions, or limitations the RT Act or the regulations of subchapter 4.5 (commencing at section 30400) place on the individual's certificate or permit issued under the RT Act.
- (g) For purposes of subsections (b) and (c), nothing in this section may be construed to authorize a RTF or PAF permit holder to substitute for the certified S&O.

Note: Authority: Sections 114870(a), 114975, 115060 and 131200, Health and Safety Code. Reference: Sections 106965, 106980, 106985, 114870, 115060, 131050, 131051 and 131052, Health and Safety Code.

Amend Section 30307 to read as follows:

§ 30307. Fluoroscopic Installations.

- (a) through (c) No change to Text.
- (d) The user shall ensure that the total fluoroscopic irradiation time and, if provided by the equipment, the cumulative air kerma, as those terms are defined in title 21, Code of Federal Regulations, Part 1020.30(b) referenced in section 30305(a)(4), are recorded for each patient. This record shall be maintained for three years and made available for inspection by the Department. The record need not, but may, be retained in the patient's medical record or identify a patient by name but the recorded value shall be trackable to the particular patient.

Note: Authority cited: Sections 102, 208 and 25811, Health and Safety Code. Reference: Sections 25801, 25802, 25811 and 25815, Health and Safety Code.

California Code of Regulations
Title 17. Public Health
Division 1. Department of Health Services
Chapter 5. Sanitation
Subchapter 4.5. Radiologic Technology
Group 1. Administration
Article 1. Definitions

Amend Section 30400 to read as follows:

§ 30400. Definitions.

- (a) As used in this subchapter:
- (1) through (7) No change to text.
- (8) "Certified diagnostic radiologic technologist" means a CRT who holds a current and valid diagnostic radiologic technology certificate issued pursuant to section 30440(b).
 - (9) and (10) No change to text.
- (11) "Certified therapeutic radiologic technologist" means a CRT who holds a current and valid therapeutic radiologic technology certificate issued pursuant to section 30440(c).
 - (12) through (36) No change to text.
- (37) "Qualified practitioner" means any <u>certified supervisor and operator, CRT or</u>

 <u>XT of the following persons acting within the scope of the person's individual's certificate or permit:</u>
 - (A) A certified supervisor and operator; or
- (B) Any CRT or XT who has at least two years of radiologic technology experience.
 - (38) through (45) No change to text.

Note: Authority cited: Sections 114870(a) and 131200, Health and Safety Code. Reference: Sections 106990, 114850, 114870, 131050, 131051 and 131052, Health and Safety Code.

Group 2. Training of Students of Radiologic Technology Article 1. General

Amend Section 30411 to read as follows:

§ 30411. General Provisions.

- (a) through (d) No change to text.
- (e) An approved radiologic technology certification school accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) shall be deemed to meet sections 30418, 30419 and 30423 and 30421 or 30422, as applicable. Once a school is no longer JRCERT-accredited, the school shall be subject to sections 30418, 30419 and 30423 and 30421 or 30422, as applicable. Nothing in this provision may be construed to exempt a JRCERT-accredited school from complying with section 106985(e) of the Health and Safety Code.

Note: Authority cited: Sections 114870 and 131200, Health and Safety Code. Reference: Section 107035, 107045, 107050, 107055, 114870, 131050, 131051 and 131052, Health and Safety Code.

Amend Section 30417 to read as follows:

§ 30417. Student Supervision at Clinical Sites.

- (a) and (b) No change to text.
- (c) Except as provided in subsection (e), diagnostic radiologic technology students, when operating X-ray equipment, shall be under direct oversight until the person providing direct oversight has determined that the student has achieved competency for the particular procedure. For students in a radiologic technology certification school, the determination that the student has achieved competency shall be made by a qualified practitioner who is either a certified radiologic technologistCRT, as applicable, with at least two years of radiologic technology experience, or a supervising licentiate. For students in a limited permit X-ray technician school, the determination that the student has achieved competency shall be made by a qualified practitioner, as applicable, with at least two years of radiologic technology experience,

except that a supervising licentiate need not meet the two-year requirement. Once a student has achieved competency, the student may then perform procedures under indirect oversight. However, students shall continue to be under direct oversight during performance of a repeat of any unsatisfactory radiograph or image. The competency determination shall be written, dated, and printed and signed by the person providing direct oversightmaking the determination.

- (d) and (e) No change to text.
- (f) Persons providing direct or indirect oversight:
- (1) May only act as a qualified practitioner for students within the scope of the certificate or permit that qualifies that person as a qualified practitioner; and
- (2) Except for a certified supervisor and operator, shall have at least two years of radiologic technology experience.
 - (gf) No change to text.

Note: Authority cited: Sections 114870(a) and 131200, Health and Safety Code. Reference: Section 114870, 131050, 131051 and 131052, Health and Safety Code.

Amend section 30418 to read as follows:

§ 30418. Faculty Requirements and Qualifications.

- (a) Radiologic technology (RT) certification schools shall have:
- (1) A program director who:
- (A) By January 1, 2016, possesses Possesses at least a master's degree from an accredited college or university;
 - (B) and (C) No change to text.
- (2) If the school has more than 30 students or six or more affiliated clinical sites, at least one full-time equivalent (FTE) clinical coordinator position. This position may be shared by no more than four individuals. Any person who functions as a clinical coordinator shall:
- (A) By January 1, 2016, possess Possess at least a baccalaureate degree from an accredited college or university; and

- (B) No change to text.
- (b) Limited permit X-ray technician schools shall have:
- (1) A program director who:
- (A) By January 1, 2016, possesses Possesses at least a baccalaureate degree from an accredited college or university;
 - (B) and (C) No change to text.
- (2) Except for approved schools whose clinical sites are within the same business entity as the school, if the school has more than 30 students or six or more affiliated clinical sites, at least one FTE clinical coordinator position. One FTE position may be shared by multiple individuals but no more than four individuals. Any person who functions as a clinical coordinator shall:
- (A) By January 1, 2016, possesses Possess at least an associate degree from an accredited college or university; and
 - (B) No change to text.
 - (c) Radiologic technologist fluoroscopy permit schools shall have:
 - (1) A program director who:
- (A) By January 1, 2016, possesses Possesses at least an associate degree from an accredited college or university; and
 - (B) and (C) No change to text.
- (2) Except for approved schools whose clinical sites are within the same business entity as the school, if the school has more than 30 students or six or more affiliated clinical sites, at least one FTE clinical coordinator position. One FTE position may be shared by multiple individuals but no more than four individuals. Any person who functions as a clinical coordinator shall:
- (A) By January 1, 2016, possesses Possess at least an associate degree from an accredited college or university; and
 - (B) No change to text.
 - (d) and (e) No change to text.

Note: Authority cited: Sections 114870(a) and 131200, Health and Safety Code. Reference: Sections 114870(a), 131050, 131051 and 131052, Health and Safety Code.

Article 3. Radiologic Technologist Fluoroscopy Permit Schools

Amend section 30423 to read as follows:

§ 30423. Radiologic Technologist Fluoroscopy Permit Schools.

(a) Subject to subsection (h), in order to be approved by the Department as a radiologic technologist fluoroscopy permit school, a school shall offer a course of study that includes in its curriculum all requirements of subsections (b) and (c) of this section.

(b) Subject to subsection (h), the classroom instruction shall include at least the following:

Subject	Hours of Instruction
(1) Fluoroscopy regulations and radiation safety	10
(2) Fluoroscopy equipment	5
(3) X-ray image intensifiers	4
(4) Television, including closed circuit equipment	4
(5) Image recording and image recording equipment	6
(6) Special fluoroscopy equipment	5
(7) Mobile image intensified units	2
(8) Anatomy and physiology of the eye	2
(9) Three-dimensional and radiological anatomy	2

⁽c) Subject to subsection (h), at least 15 hours of laboratory in which each student shall conduct experiments on phantoms to illustrate at least the following:

⁽¹⁾ Methods of reducing dose to patients during fluoroscopy procedures.

⁽²⁾ Methods of reducing exposure to self and personnel.

⁽³⁾ Image recording during the exposure of phantom.

- (4) Quality control of fluoroscopy equipment.
- (d) Subject to subsection (h), each training facility approved as a radiologic technology fluoroscopy permit school shall meet and maintain all standards set forth in this section. Failure of an applicant to meet any of these standards shall be grounds for denial of approval. Failure of an approved radiologic technology fluoroscopy permit school to maintain any of these standards shall be grounds for suspension or revocation of approval.
- (e) Subject to subsection (h), approved (a) Approved radiologic technologytechnologist fluoroscopy permit schools shall require that each student who graduates from the school completes the fluoroscopy coursework and clinical training specified in subsection (f)(b).
- (f) Subject to subsection (h), fluoroscopy(b) Fluoroscopy coursework and clinical training shall include:
 - (1) and (2) No change to text.
- (g) Subject to subsection (h), documentation(c) Documentation of clinical training as specified in subsection (f)(b)(2) shall include an orientation check-off of each fluoroscopic room or portable fluoroscopy device prior to initial use. The check-off document shall, as it pertains to the particular room or device, include items necessary for safe and effective use of the equipment as determined by the school or affiliated clinical site. Documentation of procedures performed shall include the name of the procedure, the date the procedure was performed, the facility name, including the physical location, where performed, and the name and certificate or permit number of the person observing and verifying performance.
- (h) After December 31, 2014, subsections (a) through (d) shall no longer apply. On and after January 1, 2015, subsections (e) through (g) apply.

Note: Authority cited: Sections 114870 and 131200, Health and Safety Code. Reference: Sections 107045, 114870(d), 131050, 131051 and 131052, Health and Safety Code.

*Copies of this document are available at https://www.arrt.org. Click on "Examinations" then "Content Specs" and then select "Fluoroscopy." https://www.arrt.org/pdfs/state-licensing/fluoroscopy-content-specification.pdf.

Group 3. Certificates for Radiologic Technologists and Permits for Limited Permit X-Ray Technicians. Article 1. Certification of Radiologic Technologists

Adopt Section 30441 within Article 1 of Group 3 of Subchapter 4.5 to read as follows:

§ 30441. CRT Scope of Practice.

- (a) Subject to subsection (c), the scope of practice of a certified radiologic technologist (CRT) includes, but is not limited to:
 - (1) Providing optimal patient care.
- (2) Receiving, relaying, and documenting verbal, written, and electronic orders in the patient's medical record.
- (3) Corroborating patient's clinical history with procedure, ensuring information is documented and available for use by a licentiate of the healing arts.
 - (4) Verifying informed consent for applicable procedures.
 - (5) Assuming responsibility for patient needs during radiologic procedures.
 - (6) Preparing patients for radiologic procedures.
- (7) Applying principles of ALARA, as defined in title 10, Code of Federal

 Regulations, section 20.1003 as incorporated by reference in section 30253, to minimize radiation exposure to patient, self, and others.
- (8) Performing venipuncture in compliance with Health and Safety Code section 106985.
- (9) Identifying, preparing or administering medications as prescribed by a licentiate of the healing arts in accordance with the facility's policies and procedures including the administration of medications via an existing access line or port such as an intravenous (IV) line, or peripherally inserted cardiac catheter (PICC), provided a licensed physician is physically present in the facility and available to provide immediate medical intervention to prevent or mitigate injury to the patient in the event of adverse reaction. For purposes of this provision, "medications" means any chemical substance intended for use in the medical diagnosis, cure, treatment or prevention of disease. This provision shall not be construed to authorize a CRT to establish an IV line, PICC,

central line or other vascular access site, or to authorize the identification, preparation or administration of radioactive material including radiopharmaceuticals, or to perform nuclear medicine technology as defined in Health and Safety Code section 107150.

- (10) Evaluating images for technical quality and ensuring proper identification is recorded.
- (11) Identifying and managing emergency situations in accordance with the facility's policies and procedures.
 - (12) Providing education to patients regarding the procedure.
- (13) Educating and monitoring students and others about procedures, roles and responsibilities of individuals in the profession along with the biological effects of radiation and protection.
- (14) Performing ongoing quality assurance activities, as applicable, such as quality control testing of equipment, monitoring image production, and evaluating quality assurance results.
- (15) Performing, appropriate to the individual's certification, diagnostic or therapeutic radiologic procedures as prescribed by a licentiate of the healing arts provided the individual holds a current and valid certificate or permit issued pursuant to, as applicable, sections 30440, 30451, or 30455.1.
 - (16) Determining technical exposure factors.
 - (17) Assisting with fluoroscopic and specialized radiologic procedures.
- (18) Applying the principles of patient safety during all aspects of radiologic procedures.
- (b) Subject to subsection (c), the scope of practice of a certified therapeutic radiologic technologist includes, but is not limited to:
- (1) Delivering radiation therapy treatments as prescribed by a licentiate of the healing arts.
- (2) Performing simulation, treatment planning procedures and dosimetric calculations as prescribed by a licentiate of the healing arts.
- (3) Using imaging technologies such as fluoroscopy X-ray and computerized tomography equipment for the explicit purpose of simulation, treatment planning and

treatment delivery as prescribed by a licentiate of the healing arts.

- (4) Detecting and reporting significant changes in patients' conditions and determining when to withhold treatment until an appropriate certified supervisor and operator is consulted.
- (5) Monitoring doses to normal tissues within the irradiated volume to ensure tolerance levels are not exceeded.
- (6) Constructing or preparing immobilization, beam directional, and beam modification devices.
- (7) Participating in brachytherapy procedures in accordance with a specific license authorizing medical use of radioactive material pursuant to section 30195(a).
- (c) A CRT may only use X-ray equipment under supervision of a certified supervisor and operator (S&O). A CRT holding:
- (1) Either a certificate in diagnostic or mammographic radiologic technology shall be under supervision of a certified S&O who holds a radiology S&O certificate or radiography S&O permit.
- (2) A certificate in therapeutic radiologic technology shall be under supervision of a certified S&O who holds either a radiology S&O certificate, or, for the purposes of treatment of diseases and tumors of the skin, a dermatology S&O permit.
- (3) A radiologic technologist fluoroscopy permit, when using fluoroscopy X-ray equipment, shall be under supervision of a certified S&O who holds either a radiology S&O certificate or fluoroscopy S&O permit.

Note: Authority: Sections 114870(a) and 131200, Health and Safety Code. Reference: Sections 106965, 106980, 106985, 114870, 131050, 131051 and 131052, Health and Safety Code.

Group 4. Use of Fluoroscopy Equipment by Radiologic Technologists Article 1. Radiologic Technologist Fluoroscopy Permits

Amend Section 30450 to read as follows:

§ 30450. Radiologic Technologist Fluoroscopy Permit Requirement.

(a) No change to text.

- (b) A radiologic technologist fluoroscopy (RTF) permit is not required of a certified therapeutic radiologic technologist performing fluoroscopy for therapeutic treatment planning purposes. This exception may not be construed to allow a certified therapeutic radiologic technologist to use fluoroscopy for diagnostic purposes.
- (c) An individual, who performs tasks as a non-permitted individual, defined in and for purposes of section 30305.5, need not hold the RTF permit or the permit issued pursuant to section 30456.2, or be a CRT or XT, provided the tasks are performed in accordance with section 30305.5. This provision may not be construed to authorize a non-permitted individual to perform tasks subject to the Act or to perform radiologic technology other than as specified in section 30305.5.

Note: Authority cited: Sections 114870(a) and 131200, Health and Safety Code. Reference: Section 106995, 114870(c), 131050, 131051 and 131052, Health and Safety Code.

Group 4.6. Use of Fluoroscopy Equipment by Physician Assistants Article 1. Authorization for Physician Assistants to Use Fluoroscopy Equipment

Amend Section 30456 to read as follows:

§ 30456. General Provisions.

- (a) through (c) No change to text.
- (d) An individual, who performs tasks as a non-permitted individual, defined in and for purposes of section 30305.5, need not hold the RTF permit or the permit issued pursuant to section 30456.2 provided the tasks are performed in accordance with section 30305.5. This provision may not be construed to authorize a non-permitted individual to perform tasks subject to the Act or to perform radiologic technology other than as specified in section 30305.5.

Note: Authority cited: Sections 114872 and 131200, Health and Safety Code. Reference: Sections 106995, 114872, 131050, 131051 and 131052, Health and Safety Code.

Amend Section 30456.4 to read as follows:

§ 30456.4. Fluoroscopy Coursework, Clinical Training, and Providers.

- (a) No change to text.
- (b) Fluoroscopy coursework and clinical training shall include:
- (1) Coursework comprising no less than 40 hours of instruction that fully covers the subject matter in the didactic content section of the "Fluoroscopy Educational Framework for the Physician Assistant" published by the American Society of Radiologic Technologists and dated December 2009, which is hereby incorporated by reference; and
 - (2) No change to text.
- (c) Documentation of clinical training as specified in subsection (b)(2) shall include an orientation check-off of each fluoroscopic room or portable fluoroscopy device prior to initial use. The document "Fluoroscopic Device Orientation Check-off" as found in the publication identified in subsection (a)(1)(b)(1) shall be used.

 Documentation of procedures performed shall include the name of the procedure, the date and time of day the procedure was performed, the facility, including location, where performed, and the name and certificate or permit number of the person observing and verifying performance.
 - (d) No change to text.

Note: Authority cited: Sections 114872 and 131200, Health and Safety Code. Reference: Sections 114872, 131050, 131051 and 131052, Health and Safety Code.