

Methodology to Indicate Changes to
DPH-10-007 – Health and Medical Physicist Authorization

The proposed changes for comment that are the subject of this 15-day public comment period are indicated as follows:

- Deleted text is indicated by double strike-through (~~strike-through~~).
- Additions to the regulation text are indicated by double underline (underline).

Regulation text not subject to this 15-day public comment period are presented for the reader's convenience and are indicated as follows:

- Deleted text as initially proposed is indicated by single strike-through (~~strike-through~~).
- Added text as initially proposed is indicated by single underline (underline).

TITLE 17. PUBLIC HEALTH
DIVISION 1. STATE DEPARTMENT OF HEALTH SERVICES
CHAPTER 5. SANITATION (ENVIRONMENTAL)
SUBCHAPTER 4. RADIATION
Group 3. Standards for Protection Against Radiation
Article 4. Special Requirements for the Use of X-Ray in the Healing Arts

Amend Section 30306 to read as follows:

§ 30306. Definitions.

~~(a) "Automatic exposure control" means a device which automatically controls one or more technique factors in order to obtain at a preselected location(s) a required quantity of radiation.~~

~~(b) "Cineradiography" means the making of a motion picture record of the successive images appearing on a fluorescent screen.~~

~~(c) "Contact therapy" means irradiation of accessible lesions usually employing a very short source-skin distance and potentials of 40-50 KV.~~

~~(d) "Dead-man switch" means a switch so constructed that a circuit-closing contact can only be maintained by continuous pressure by the operator.~~

~~(e) "Diagnostic type tube housing" means an X-ray tube housing so constructed that the leakage radiation measured at a distance of 1 meter from the source cannot exceed 100 milliroentgens in 1 hour when the tube is operated at its maximum continuous rate of current for the maximum rated tube potential.~~

~~(f) "Filter" means material placed in the useful beam to absorb preferentially the less penetrating radiations.~~

~~(g) "Interlock" means a device for precluding access to an area of radiation hazard either by preventing entry or by automatically removing the hazard.~~

~~(h) "Leakage radiation" means all radiation coming from within the tube housing except the useful beam.~~

~~(i) "Protective barrier" means a barrier of attenuating materials used to reduce radiation exposure.~~

~~(j) "Primary protective barrier" means a barrier sufficient to attenuate the useful beam to the required degree.~~

~~(k) "Scattered radiation" means radiation that, during passage through matter, has been deviated in direction.~~

~~(l) "Secondary protective barrier" means a barrier sufficient to attenuate stray radiation to the required degree.~~

~~(m) "Shutter" means a device, generally of lead, fixed to an X-ray tube housing to intercept the useful beam.~~

~~(n) "Stray radiation" means radiation not serving any useful purpose. It includes leakage and scattered radiation.~~

~~(o) "Therapeutic type tube housing" means,~~

~~(1) For X-ray therapy equipment not capable of operating at 500 kVp or above, an X-ray tube housing so constructed that the leakage radiation at a distance of 1 meter~~

~~from the source does not exceed 1 roentgen in an hour when the tube is operated at its maximum rated continuous current for the maximum rated tube potential.~~

~~(2) For X-ray therapy equipment capable of operating at 500 kVp or above, an X-ray tube housing so constructed that the leakage radiation at a distance of 1 meter from the source does not exceed either 1 roentgen in an hour or 0.1 percent of the useful beam dose rate at 1 meter from the source, whichever is greater, when the machine is operated at its maximum rated continuous current for the maximum rated accelerating potential.~~

~~(3) In either case, small areas of reduced protection are acceptable provided the average reading over any 100 square centimeters area at 1 meter distance from the source does not exceed the values given above.~~

~~(p) "Useful beam" means that part of the radiation which passes through the window, aperture, cone, or other collimating device of the tube housing. (T17-30306-T24).~~

(a) The definitions in section 30100 shall apply to this article.

(b) As used in this article:

(1) "Approved continuing education credit" means 50 to 60 minutes of instruction received in subjects related to medical or health physics, as applicable, and accepted for purposes of credentialing, assigning professional status, or certification by:

(A) The Commission on Accreditation of Medical Physicists Educational Programs, Inc.; or

(B) American Academy of Health Physicists.

(2) through (5) *No change to initially proposed text.*

(6) "Diagnostic medical physicist" means an individual who meets the requirements of section 30313.04, who performs the tasks specified in section 30307(b)(3) and (b)(4) and:

(A) Holds a bachelor's degree in medical physics, health physics, a physical science, engineering, or applied math from an accredited college or university; and

(B) Has completed 2,000 hours of training and 2,000 hours of work experience in evaluating and testing diagnostic X-ray systems.

(7) *No change to initially proposed text.*

(8) "Direct supervision" means that the supervising individual is physically present and available within the facility during the performance of tasks by the supervised individual.

(9) "DMP" means a diagnostic medical physicist.

(10) *No change to initially proposed text.*

(11) "Health physicist" means an individual who meets the requirements of section 30313.05 and performs tasks specified in sections 30307 and 30312.

(12) "HP" means a health physicist.

(13) and (14) *No change to initially proposed text.*

(15) "Personal supervision" means that the supervising individual is physically present to observe, and correct, as needed, the performance of the individual performing the activities.

(16) through (21) *No change to initially proposed text.*

(22) "Supervision" means responsibility for the acts and omissions of persons being supervised, and control of the quality, radiation safety, and technical aspects of activities being supervised, and being available to the supervised individual.

(23) "Therapeutic medical physicist" means an individual who meets the requirements of section 30313.10 and performs the tasks specified in section 30312(b), but does not include an individual authorized pursuant to section 30315.60.

(24) *No change to initially proposed text.*

(25) "TMP" means a therapeutic medical physicist.

(26) *No change to initially proposed 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.

Amend Section 30307 to read as follows:

§ 30307. Fluoroscopic Installations.

(a) *No change to Initially Proposed Text.*

(b) ~~Operating Procedures.~~ The user shall ensure the following:

(1) *No change to Text.*

(2) *No change to initially proposed text.*

(3) Measurements of the table top or patient exposure rate shall be made by or under the supervision of a DMP, HP or TMP at least once each year for units with automatic exposure control, and at least once each 3 years for units without automatic exposure control, and immediately following alteration or replacement of a major component, such as the X-ray tube, the exposure controls, the imaging assembly, and the power source. The user, before allowing a DMP to make or supervise the measurements, shall verify and document the DMP meets sections 30313.04(a)(1) and (a)(2), and the date of verification shall be used for purposes of section 30313.04(a)(3). Before a person, other than a DMP, HP or TMP, makes the measurements, a DMP, HP, or TMP shall have verified, in writing, that the individual has performed at least 10 measurements under personal supervision of a DMP, HP, or TMP, and is competent to perform the measurements under supervision.

(4) On the cineradiography equipment, the exposure rates to which patients are normally subjected shall be determined by or under the supervision of a DMP, HP or TMP at least once each year, and immediately following alterations or replacement of a major component, such as the X-ray tube, the exposure controls, the imaging assembly, and the power source. The user, before allowing a DMP to make or supervise the measurements, shall verify and document the DMP meets section 30313.04(a)(1) and (a)(2) and the date of verification shall be used for purposes of section 30313.04(a)(3). Before a person, other than a DMP, HP or TMP, makes the measurements, a DMP, HP, or TMP shall have verified, in writing, that the individual has performed at least 10 measurements under personal supervision of a DMP, HP, or TMP, and is competent to perform the measurements under supervision.

~~(c) Users shall maintain for inspection records, and persons performing tasks under supervision of a DMP, HP or TMP, that demonstrate a DMP, HP or TMP meets the applicable criteria and that the measurements specified in subsections (b)(3) and (b)(4) were completed; the records shall indicate the date the measurements were taken and the exposure value obtained.~~

(c) Users shall maintain for inspection:

(1) Documentation demonstrating a DMP, HP or TMP, and persons performing tasks under supervision of a DMP, HP or TMP, meets the applicable criteria;

(2) Records of the measurements specified in subsections (b)(3) and (b)(4). The records shall indicate the date the measurements were taken, the exposure value obtained, who performed the measurement, and who provided supervision, if applicable; and

(3) Applicable service documentation for purposes of subsections (b)(3) and (b)(4).

Note: Authority cited: Sections 102, 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.

Adopt Section 30313.04 to read as follows:

§ 30313.04. Diagnostic Medical Physicist Requirements.

(a) A person who performs as an DMP, as defined in section 30306, shall meet the following:

(1) Hold a bachelor's degree in medical physics, health physics, a physical science, engineering, or applied math from an accredited college or university;

(2) Have completed 2,000 hours of training and work experience in evaluating and testing diagnostic X-ray systems. Work as a part of a medical physicist residency program accredited by the Commission on Accreditation of Medical Physicists

Educational Programs, Inc. may be counted towards the work experience requirement:
and

(3) Have obtained 15 approved continuing education credits, as defined in section 30306, every three years beginning on the date the user, pursuant to section 30307(b)(3) or (b)(4), has verified the person meets paragraphs (1) and (2) or subsection (b).

(b) Individuals who meet the criteria in sections 30313.05 or 30313.10 but do not hold authorization issued pursuant to section 30313.15 may be deemed to meet paragraphs (1) and (2) of subsection (a), provided the user, in accordance with section 30307(c)(1), maintains documentation demonstrating the individual meets the criteria. However, the individual shall be subject to subsection (a)(3).

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

Adopt Section 30313.05 to read as follows:

§ 30313.05. Health Physicist Requirements.

(a) A person who performs as an HP, as defined in section 30306, shall be authorized by the Department pursuant to section 30313.15 and:

(1) Be certified by:

(A) American Board of Radiology in Diagnostic Medical Physics;

(B) American Board of Health Physics and have completed:

1. At least 100 hours of didactic training in radiologic physics. The number of hours required to meet this provision may not be counted toward meeting the requirement in clause two; and

2. At least 1,000 hours of work experience in diagnostic medical physics under the supervision of a TMP. Work as a part of an accredited medical physics residency counts toward this requirement. The number of hours required to meet this provision may not be counted toward meeting the requirement in clause one;

(C) American Board of Medical Physics in Medical Health Physics or Diagnostic Imaging Physics; or

(D) Canadian College of Physicists in Medicine in Diagnostic Radiological Physics; or

(2) Have at least a bachelor's degree in physics, health physics, a physical science or engineering from an accredited college or university and have completed, within five years preceding the date of application:

(A) At least 2,000 hours of training in health or radiologic physics, of which 100 hours shall be didactic training in radiologic physics. The number of hours required to meet this provision may not be counted toward meeting the requirement in subparagraph (B); and

(B) At least 2,000 hours of work experience in health physics, of which 1,000 hours shall be in evaluating and testing diagnostic X-ray systems, under the supervision of an HP or TMP. Work as a part of a medical physicist residency program accredited by the Commission on Accreditation of Medical Physicists Educational Programs, Inc. may be counted towards the work experience requirement. The number of hours required to meet this provision may not be counted toward meeting the requirement in subparagraph (A).

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

Adopt Section 30313.10 to read as follows:

§ 30313.10. Therapeutic Medical Physicist Requirements.

(a) A person who performs as a TMP, as defined in section 30306, shall be authorized by the Department as a TMP pursuant to section 30313.15 and:

(1) Be certified by:

(A) The American Board of Radiology in Therapeutic Medical Physics;

(B) American Board of Medical Physics in Radiation Oncology Physics or Medical Health Physics; or

(C) Canadian College of Physicists in Medicine in Radiation Oncology Physics;

or

(2) Have at least a graduate degree in medical physics, health physics, a physical science, or engineering from an accredited college or university and have completed, within five years preceding the date of application:

(A) At least 2,000 hours of training in therapeutic medical physics, of which 500 hours shall be in diagnostic medical physics. The number of hours required to meet this provision may not be counted toward meeting the requirement in subparagraph (B); and

(B) At least 2,000 hours of work experience in clinical therapeutic medical physics, of which 500 hours shall be in evaluating and testing diagnostic X-ray systems under the supervision of a TMP. Work as a part of a medical physicist residency program accredited by the Commission on Accreditation of Medical Physicists Educational Programs, Inc. may be counted towards the work experience requirement. The number of hours required to meet this provision may not be counted toward meeting the requirement in subparagraph (A).

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

Adopt Section 30313.15 to read as follows:

§ 30313.15. Eligibility for and Issuance of Health or Therapeutic Medical Physicist Authorization.

(a) To be eligible for authorization as an HP or TMP, an applicant shall submit to the Department an acceptable application containing:

- (1) The applicant's legal name, mailing address and telephone number;
- (2) The applicant's social security number (SSN) or individual taxpayer identification number (ITIN) (pursuant to the authority found in sections 131050, 131051, and 131200 of the Health and Safety Code and as required by section 17520 of the Family Code, providing the ~~social security number~~ SSN or ITIN is mandatory. The ~~social security number~~ SSN or ITIN will be used for purposes of identification.);

- (3) through (5) *No change to initially proposed text.*
(b) *No change to initially proposed text.*

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

Adopt Section 30313.20 to read as follows:

§ 30313.20. Renewal of Health or Therapeutic Medical Physicist Authorization.

(a) To be eligible for renewal of authorization as an HP or a TMP, an individual shall, at least 30 calendar days prior to the expiration date of authorization, submit to the Department an acceptable application consisting of:

(1) The applicant's legal name, mailing address, telephone number and authorization number as shown on the Department-issued authorization, except that individuals who were previously approved or authorized health or therapeutic medical physicists and are applying for purposes of section 30313.40 shall include their social security number (SSN) or individual taxpayer identification number (ITIN). (Pursuant to the authority found in sections 131050, 131051, and 131200 of the Health and Safety Code and as required by section 17520 of the Family Code, providing the ~~social security number~~ SSN or ITIN is mandatory. The ~~social security number~~ SSN or ITIN will be used for purposes of identification.)

(2) Except for individuals who were previously approved or authorized health or therapeutic medical physicists and are applying for purposes of section 30313.40, documentation confirming completion of approved continuing education credits as specified in section 30313.35 that includes:

- (A) The name of the approving organization;
- (B) The name of the instructor or provider and their contact information;
- (C) A description of the instruction provided; and
- (D) The dates of the instruction; and
- (3) The fee for renewal as specified in section 30313.45.

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

Adopt Section 30313.25 to read as follows:

§ 30313.25. Change of Name, Address or Social Security Number.

Each HP or TMP authorized pursuant to section 30313.15 shall report in writing to the Department, within 30 calendar days, any change of name, mailing address, social security number or individual taxpayer identification number ~~or social security number.~~

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