

**ADOPTED REGULATION OF THE
STATE BOARD OF HEALTH**

LCB File No. R043-20

EXPLANATION – Matter in *italics* is new; matter in brackets ~~omitted material~~ is material to be omitted.

AUTHORITY: §1, NRS 439.150, 439.200, 457.065, 457.183 and 457.184; §2, NRS 439.200, 459.030 and 459.201; §3, NRS 439.150, 439.200, 459.201 and 653.460; §§4-8 and 20, NRS 439.200 and 459.201; §§9, 10, 15 and 18, NRS 439.150, 439.200 and 653.460; §§11-13, 17 and 19, NRS 439.200, 653.460 and 653.630; §14, NRS 439.200, 653.460, 653.610 and 653.620; §16, NRS 439.150, 439.200, 457.183 and 653.460.

A REGULATION relating to radiation; revising provisions concerning certain fees; requiring certain fees and notice to be submitted electronically; prohibiting a person who holds a registration to install or service a radiation machine from engaging in certain conduct; removing certain requirements concerning gonadal shielding; prescribing requirements concerning quality assurance programs for X-ray photographs adopted by certain health facilities; requiring the submission of certain information as part of an application for the issuance or renewal of a registration to perform computed tomography or fluoroscopy; prescribing the date of expiration of certain registrations to perform radiation therapy or radiologic imaging; exempting the holder of a mammographer's certificate from certain fees; adopting standards of ethics for the holders of certain licenses, limited licenses and registrations; revising requirements concerning proof of continuing education for persons who engage in radiation therapy or radiologic imaging; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law requires the State Board of Health to adopt certain regulations for the administration of chapter 457 of NRS which relates to cancer, including, without limitation, regulations concerning the operation of radiation machines for mammography. (NRS 457.065) Existing law provides that a certificate of authorization for a radiation machine for mammography expires 1 year after the date on which it was issued unless it is renewed before that date. Existing law requires the Division of Public and Behavioral Health of the Department of Health and Human Services to charge a fee for the issuance and renewal of such a certificate that is calculated to cover the administrative costs directly related to the process of issuing a certificate or to the renewal of a certificate. (NRS 457.184) Existing regulations require the Division to charge and collect a fee of \$551 for the issuance or renewal of a certificate for a machine. (NAC 457.295) **Section 1** of this regulation requires a person who fails to pay the renewal fee in a timely manner to: (1) pay the renewal fee and an additional late fee of \$56

within 5 days after the date on which the certificate expired; and (2) stop operating the machine until the fee is paid.

Existing law and regulations provide for: (1) the licensure of radioactive materials; and (2) the registration of radiation machines and persons who install or service radiation machines. (NRS 459.201; NAC 459.150-459.313) Existing regulations prohibit a licensee or certain affiliated persons from engaging in deliberate misconduct or knowingly submitting incomplete or inaccurate information to the Division. (NAC 459.135) **Section 2** of this regulation additionally prohibits a registrant or certain persons affiliated with a registrant from engaging in similar conduct.

Existing regulations require an applicant for the issuance or renewal of registration of a radiation machine to pay a fee for each X-ray tube, electron source or source of ionizing radiation installed in each radiation machine. If the renewal fee is not submitted in a timely manner, the applicant is required to stop operating the machine or pay the required fee and an additional late fee of \$56 within 5 days after the date on which the registration expired. (NAC 459.161) **Section 3** of this regulation revises these provisions to require the registrant to either: (1) pay the renewal fee before the expiration date; (2) notify the Division before the expiration date that the machine to which the registration has been applied has been transferred, placed in storage or disposed of; or (3) pay the renewal fee and late fee. **Sections 3 and 4** also require any renewal fee or notice of a change to the information in an application for registration or a registration certificate to be submitted electronically.

Sections 6 and 7 of this regulation remove requirements concerning gonadal shielding for a patient undergoing certain medical and dental radiographic procedures and **sections 5, 8 and 20** of this regulation make conforming changes.

Existing law generally requires a person who: (1) engages in radiation therapy to hold a license to engage in radiation therapy; and (2) engages in radiologic imaging to hold a license or a limited license to engage in radiologic imaging. (NRS 653.500) Existing law authorizes a person who does not hold a license or limited license to take X-ray photographs if the person: (1) registers with the Division; (2) completes certain training and continuing education; and (3) such X-ray photographs are taken as part of his or her employment as an independent contractor in a rural health clinic or federally-qualified health center that is located in a county whose population is less than 55,000 and has established a quality assurance program for X-ray photographs. (NRS 653.620) Existing regulations refer to such registration as a “rural authorization” and establish the requirements for the issuance and renewal of a rural authorization. (Section 27 of LCB File No. R074-19) **Section 10** of this regulation defines the term “rural authorization” for chapter 653 of the Nevada Administrative Code, and **sections 15, 16 and 18** of this regulation make conforming changes. **Sections 11 and 13** of this regulation prescribe the requirements that a quality assurance program for X-ray photographs adopted by a rural health clinic or federally-qualified health center must meet for the rural health clinic or federally-qualified health center to be eligible to employ the holder of a rural authorization or allow the holder of a rural authorization to serve as an independent contractor. **Section 19** of this regulation requires an applicant for the issuance or renewal of a rural authorization to submit to the Division proof that the person will be employed or serve as an independent contractor in a

rural health clinic or federally-qualified health center that has established a quality assurance program that meets such requirements.

Existing law generally prohibits a person from performing computed tomography or fluoroscopy unless he or she: (1) is licensed to engage in radiation therapy or radiologic imaging; and (2) holds a certification from certain national accrediting organizations that is specific to the performance of computed tomography or fluoroscopy, as applicable. (NRS 653.630, 653.640) Existing law authorizes a person who performs computed tomography or fluoroscopy as part of his or her employment on January 1, 2020, to continue to perform any such activity on and after that date without obtaining such licensure and certification if he or she: (1) registers with the Division; (2) provides any information requested by the Division; and (3) does not expand the scope of his or her duties relating to computed tomography or fluoroscopy. (NRS 653.620) **Section 12** of this regulation prescribes the information that a person must provide to the Division in order to apply for the issuance or renewal of registration to perform computed tomography or fluoroscopy. **Section 12** also prescribes the expiration date of such a registration.

Existing law authorizes a holder of a license or limited license to engage in radiation therapy or radiologic imaging outside the scope of practice authorized for his or her license or limited license if: (1) necessary to qualify for certification by a national accrediting organization in that area; and (2) the licensee registers with the Division before engaging in such activity. (NRS 653.610) Existing law also authorizes the holder of a license who does not hold the required certification to perform computed tomography in order to obtain that certification if he or she registers with the Division before performing computed tomography. (NRS 653.630) **Section 14** of this regulation provides that such a registration expires on the same date as the underlying license or limited license, as applicable.

Existing regulations prescribe the fees for the issuance and renewal of: (1) a license to engage in radiation therapy or radiologic imaging; (2) a rural authorization; and (3) a registration to perform computed tomography or fluoroscopy. (Section 20 of LCB File No. R074-19) Existing law exempts the holder of a license or limited license from the requirement to pay a fee for the issuance or renewal of a certificate to operate a radiation machine for mammography. (NRS 457.183) **Section 16** of this regulation exempts the holder of a certificate to operate a radiation machine for mammography from the requirement to pay a fee for the issuance or renewal of a license to engage in radiation therapy or radiologic imaging.

Existing law: (1) requires the Board to adopt regulations defining the scope of practice for radiologist assistants and persons who hold licenses or limited licenses; and (2) authorizes the Board to adopt any other regulations necessary or convenient to carry out provisions of law governing radiation therapy and radiologic imaging. (NRS 653.460) **Sections 11 and 17** of this regulation require a radiologist assistant and the holder of a license, limited license, rural authorization or any registration issued pursuant to chapter 653 of NRS or NAC to comply with the *Standards of Ethics* prescribed by the American Registry of Radiologic Technologists.

Existing regulations require a holder of a license, limited license or rural authorization to: (1) complete certain continuing education; and (2) submit certain documentation of that continuing education to the Division. (Section 22 of LCB File No. R074-19) **Section 18** of this regulation authorizes a holder of a license or limited license to submit, as evidence that he or she

has completed the required continuing education, a copy of a valid certification issued by a national professional organization that indicates, as a requirement to maintain the certification, that the holder has completed continuing education that meets or exceeds the applicable requirements.

Section 1. NAC 457.295 is hereby amended to read as follows:

457.295 1. Except as otherwise provided in subsection 2, the Division shall charge and collect the following nonrefundable fees:

- (a) For the issuance or renewal of a certificate for a machine, \$551.
- (b) For the issuance or renewal of a mammographer's certificate, \$200.
- (c) For the issuance of a duplicate mammographer's certificate for posting at multiple facilities for mammography pursuant to NAC 457.360, \$25.
- (d) For the issuance or renewal of a certificate to provide training to mammographers pursuant to NAC 457.357, \$100.

2. If a payment was made in error, the Division will refund the fee collected pursuant to subsection 1, after deducting an amount calculated to cover the administrative costs directly related to issuing the refund.

3. The renewal fee must be postmarked or electronically received by the Division not later than the date on which the certificate expires. If the fee is not postmarked or electronically received by that date, the registrant shall:

- (a) Submit to the Division within 5 days after the registration expires:***
 - (1) An application for renewal of the registration;***
 - (2) A fee in an amount that is equal to the appropriate fee set forth in subsection 1; and***
 - (3) A fee for late payment of \$56 per registration; and***
- (b) Stop operating the machine to which the certificate applies until the fees required by paragraph (a) are paid.***

Sec. 2. NAC 459.135 is hereby amended to read as follows:

459.135 1. A licensee ~~or a~~, *registrant*, employee of a licensee ~~or a~~ *or registrant*, contractor or subcontractor of a licensee ~~or~~ *or registrant*, or ~~an~~ employee of *such* a contractor or subcontractor, ~~of a licensee,~~ who knowingly provides to a licensee ~~or~~ *or registrant*, or to a contractor or subcontractor of a licensee ~~or~~ *or registrant*, any component, equipment, material or other good or service that relates to the activities of the licensee *or registrant* pursuant to this chapter shall not:

(a) Engage in deliberate misconduct; or

(b) Deliberately submit to the Division, a licensee, *a registrant*, or a contractor or subcontractor of a licensee *or registrant*, information that the person submitting the information knows to be incomplete or inaccurate in some respect material to the Division.

2. A person who violates subsection 1 may be subject to an enforcement action by the Division.

3. As used in this section:

(a) “Contractor” includes a supplier and a consultant.

(b) “Deliberate misconduct” means an intentional act or omission that the person knows:

(1) Would cause or, if not detected, would have caused, a licensee *or registrant* to be in violation of any rule, regulation or order of the Division, or of any term, condition or limitation of a license issued by the Division; or

(2) Constitutes a violation of a requirement, procedure, instruction, contract, purchase order or policy of a licensee, *registrant*, contractor or subcontractor.

Sec. 3. NAC 459.161 is hereby amended to read as follows:

459.161 1. Except as otherwise provided in subsection 6, an application for the registration of a radiation machine submitted pursuant to NAC 459.154 must be accompanied by a nonrefundable fee for each X-ray tube, electron source or source of ionizing radiation which is installed in the radiation machine, as follows:

- (a) Medical use, other than mammography, \$500.
- (b) Veterinary use, \$150.
- (c) Dental use, \$140.
- (d) Industrial use, \$200.
- (e) Academic use, \$150.
- (f) Accelerator, \$550.

2. Except as otherwise provided in subsections 3 and 6, if the Division issues a registration certificate pursuant to NAC 459.156, the registrant must, for each year the certificate is valid, submit to the Division a nonrefundable renewal fee in an amount equal to the appropriate fee set forth in subsection 1.

3. The renewal fee must be *electronically* received by the Division not later than the date on which the registration expires ~~H~~ *unless, before that date, the registrant electronically submits to the Division pursuant to NAC 459.162 a notice that the registrant has transferred ownership of the radiation machine, placed the radiation machine in storage or disposed of the radiation machine.* If the fee *or notice* is not *electronically* received by that date, the registrant ~~shall:~~

~~—(a) Stop operating the radiation machine which does not have a valid registration on or before the date the registration expires; or~~

~~—(b) Submit~~ *must electronically submit* to the Division ~~{within 5 days after the registration expires:~~

~~—(1)}~~ *in the form prescribed by the Division:*

(a) An application for renewal of the registration;

~~{(2)}~~ (b) A fee in an amount that is equal to the appropriate fee set forth in subsection 1;
and

~~{(3)}~~ (c) A fee for late payment of \$56 per registration.

4. Any application for registration or renewal of registration which is not accompanied by the appropriate fees will not be acted upon by the Division until such fees are paid.

5. Except as otherwise provided in subsection 6, an application for a certificate of authorization for a radiation machine must be accompanied by a nonrefundable fee for each machine as required pursuant to NAC 457.295.

6. If a payment was made in error, the Division will refund the fee collected pursuant to this section, after deducting an amount calculated to cover the administrative costs directly related to issuing the refund.

Sec. 4. NAC 459.162 is hereby amended to read as follows:

459.162 The registrant shall *electronically* notify the Division in ~~{writing}~~ *the form prescribed by the Division* before making any change which would render the information contained in his or her application for registration or his or her registration certificate, or both, no longer accurate.

Sec. 5. NAC 459.552 is hereby amended to read as follows:

459.552 1. The registrant is responsible for the operation of the radiation machines which he or she has registered with the Division. The registrant shall ensure that the provisions of NAC 459.400 to 459.624, inclusive, are met in the operation of the radiation machine or machines.

2. An X-ray system which does not meet the provisions of NAC 459.400 to 459.624, inclusive, must not be operated for diagnostic or therapeutic purposes if the Division prohibits such operation.

3. Persons who will be operating the X-ray system must be adequately instructed in the safe operating procedures and be competent in the safe use of the equipment.

4. The registrant shall:

(a) Document that each person who will be operating the X-ray system has received the instructions required by subsection 3 and that each person's competency was verified; and

(b) Retain that documentation at least until the period of registration of the radiation machine expires.

5. In the vicinity of each control panel for an X-ray system a chart, commonly referred to as a technique chart, must be provided, which specifies for all examinations which are performed by that system a listing of information, including but not limited to the following, for each projection within that examination:

(a) Patient's anatomical size versus technique factors to be utilized;

(b) Type of and size of the film or film-screen combination to be used;

(c) Type of grid to be used, if any, and focal distance; *and*

(d) Source to image receptor distance to be used . ~~f~~ *and*

~~—(e) Type and location of placement of gonadal shielding to be used.†~~

6. Written safety procedures and rules must be provided to each person operating X-ray equipment, including any restrictions of the operating technique required for the safe operation of the particular X-ray system. The operator must be able to demonstrate familiarity with these rules.

Sec. 6. NAC 459.554 is hereby amended to read as follows:

459.554 1. Except for patients who cannot be moved out of the room, only the staff and ancillary personnel required for the medical procedure or training may be in the room during the radiographic exposure. Other than the patient being examined:

(a) All persons must be positioned so that no part of the body which is not protected by 0.5 mm lead equivalent will be struck by the useful beam.

(b) Staff and ancillary personnel must be protected from the direct scatter radiation by protective aprons or whole body protective barriers of not less than 0.25 mm lead equivalent.

(c) A patient who cannot be removed from the room must be protected from the direct scatter radiation by a whole body protective barrier of 0.25 mm lead equivalent or be so positioned that the nearest portion of the body is at least 2 meters from both the tube head and the nearest edge of the image receptor.

(d) When a portion of the body of any member of the staff or ancillary personnel is potentially subjected to stray radiation which could result in his or her receiving 10 percent of the maximum permissible dose, as defined in NAC 459.320 to 459.374, inclusive, additional protective devices must be employed.

2. ~~Gonadal shielding of not less than 0.25 mm lead equivalent must be used for potentially procreative patients during radiographic procedures in which the gonads are in the direct or useful beam, except for cases in which this would interfere with the diagnostic procedure.~~

~~—3.1~~ Persons must not be exposed to the useful beam except for the purposes of the healing arts where each exposure has been authorized by a licensed practitioner of the healing arts. This provision specifically prohibits deliberate exposure for the following purposes:

(a) Exposure of a person for training, demonstration or other purposes unless there are also healing arts requirements and proper prescription has been provided.

(b) Exposure of a person for the purpose of healing arts screening without prior written approval of the Division. Screening means an exposure of a person without a prior examination by a licensed practitioner.

~~14.1~~ 3. When a patient or film must be provided with auxiliary support during a radiation exposure:

(a) Mechanical holding devices must be used when the technique permits. The safety rules, required by NAC 459.552 to 459.558, inclusive, must include individual protections where holding devices cannot be utilized;

(b) Written safety procedures required by subsection 6 of NAC 459.552 must indicate the requirements for selecting a holder and include the procedure the holder must follow;

(c) The human holder must be protected as required by subsection 1;

(d) No person may be used routinely to hold film or patients;

(e) In those cases where the patient must hold the film, except during intraoral examinations, any portion of the body other than the area of clinical interest struck by the useful beam must be protected by not less than 0.5 mm lead equivalent material; and

(f) Such holding is permitted only in very unusual and rare situations.

~~15.1~~ 4. As used in this section, “licensed practitioner of the healing arts” means a physician, homeopathic physician, osteopathic physician, licensed veterinarian, dentist, chiropractic

physician, practitioner of Oriental medicine or podiatric physician, as those terms are defined or used, respectively, in NRS 630.014, 630A.050, 633.091 or 638.007 or chapter 631, 634, 634A or 635 of NRS.

Sec. 7. NAC 459.580 is hereby amended to read as follows:

459.580 1. In addition to the provisions of NAC 459.552 to 459.558, inclusive, and 459.564, these requirements apply to X-ray equipment and associated facilities used for dental radiography. The criteria for extraoral dental radiographic systems are covered in NAC 459.616 to 459.624, inclusive.

2. Intraoral dental radiographic machines may be used only for intraoral dental radiography.

3. X-ray systems designed for use with an intraoral image receptor must be provided with means to limit source-to-skin distance of not less than 18 centimeters.

4. Radiographic systems which are designed for use with an intraoral image receptor must be provided with means to limit the X-ray beam so that:

(a) If the minimum source-to-skin distance is 18 centimeters or more, the X-ray field at the minimum source-to-skin distance is containable in a circle having a diameter of no more than 7 centimeters; and

(b) If the minimum source-to-skin distance is less than 18 centimeters, the X-ray field at the minimum source-to-skin distance is containable in a circle having a diameter of no more than 6 centimeters.

5. A means must be provided to terminate the exposure at a preset time interval, a preset product of current and time, a preset number of pulses, or a preset radiation exposure to the image receptor. In addition:

(a) Termination of exposure must cause automatic resetting of the timer to its initial setting or to zero; and

(b) It must not be possible to make an exposure when the timer is set to a zero or off position if either position is provided.

6. When four timer tests taken at identical timer settings equal 0.5 seconds or less, the average time period (T) must be greater than or equal to five times the difference between the maximum period (T max) and the minimum period (T min) in accordance with the formula: $T \geq 5(T \text{ max} - T \text{ min})$.

7. Deviation of measured technique factors from indicated values of kVp and exposure time must not exceed the limits specified for that system by its manufacturer. In the absence of the manufacturer's specifications, the deviation must not exceed 10 percent of the indicated value for kVp and 20 percent for exposure. All timers must be accurate to within ± 20 percent of the selected value.

8. A control must be incorporated into each X-ray system so that an exposure can be terminated at any time, except for exposures of one-half second or less. The control switch must be of the dead-man type.

9. Each X-ray control must be located to meet the following criteria:

(a) Each installation must be provided with a protective barrier for the operator or must be so arranged that the operator can stand at least 6 feet from the patient and well away from the useful beam; and

(b) The X-ray control must provide visual indication observable at or from the operator's protected position whenever X-rays are produced. In addition, a signal audible to the operator must indicate that the exposure has terminated.

10. The exposure produced must be reproducible to within the following criteria: When all technique factors are held constant, the coefficient of variation must not exceed 0.10. This requirement is met if, when four exposures at identical technique factors are made, the value of the average exposure (E) is greater than or equal to five times the difference between the maximum exposure (E max) and the minimum exposure (E min) in accordance with the formula: $E \geq 5(E_{\max} - E_{\min})$.

11. Patient and film holding devices must be used when the techniques permit.

12. Neither the tube housing nor the position indicating device may be handheld during an exposure.

13. The X-ray system must be arranged and operated in such a manner that the useful beam at the patient's skin does not exceed the dimensions specified in subsection 4.

14. Dental fluoroscopy without image intensification must not be used.

15. ~~Each patient undergoing dental radiography must be draped with a protective apron of not less than 0.25 millimeters lead equivalent to cover the gonadal area.~~

~~16.~~ Dental radiation machines with a nominal fixed kVp of less than 50 kVp must not be used to make diagnostic dental radiographs of humans.

Sec. 8. NAC 459.592 is hereby amended to read as follows:

459.592 1. All new facilities and existing facilities not previously surveyed must have a radiation protection survey made by, or under the direction of, a qualified expert. This survey must also be done after any change in the facility which might produce a radiation hazard. The expert shall report his or her findings, in writing, to the person in charge of the facility and a copy of the report must be transmitted by the registrant to the Division within 30 days.

2. The radiation output of each therapeutic radiation machine must be calibrated by, or under the direction of, a qualified expert who is physically present at the facility during the calibration procedure. The calibration must be repeated after any change in, or replacement of, components of the X-ray generating equipment which could cause a change in X-ray output. Calibration of the therapy beam must be performed with a measuring instrument the calibration of which is directly traceable to national standards of exposure or absorbed dose and which has been calibrated within the preceding year. Records of the calibrations must be provided to and maintained by the registrant. In addition:

(a) Each therapeutic radiation machine must have the calibrations repeated at time intervals not exceeding 1 year. The calibration must include at least the following determinations:

(1) The accurate determination of the air dose rate or the dose rate in a suitable phantom, as appropriate, for a sufficient number of operating parameters for each effective energy to permit the determination of the dose received by the patient;

(2) Verification that the equipment is operating in accordance with the design specifications concerning the congruence between the radiation field and light localizer, when a localizer is used, and for beam flatness and symmetry at the specified depths;

(3) The effective energy, for example, half-value layer when appropriate, for every combination of kVp and filter used for radiation therapy;

(4) The uniformity of the radiation field and its dependence upon the direction of the useful beam; and

(5) The calibration determinations must be provided in sufficient detail so that the absorbed dose in rads to tissue adjacent to, as well as in the useful beam, may be calculated to within ± 5 percent of the intended absorbed dose.

(b) Therapeutic X-ray systems capable of operation at greater than 150 kVp must, in addition to the annual calibration required in paragraph (a) have spot checks performed which meet the following criteria:

(1) A spot check must be made at least monthly or after 50 operating hours, whichever is shorter, and must include carefully selected representative or indicative measurements which will demonstrate the consistency of relevant machine operating characteristics or the lack of such characteristics.

(2) The spot-check methods must be in writing and have been designed by a qualified expert. Spot checks must include verification of continued congruency between the radiation field and localizing device where an optical field illuminator is used.

(3) Spot checks which are erratic or inconsistent with calibration data must be investigated promptly.

(4) For machines in which beam quality may vary significantly, spot checks must include beam quality checks.

(5) Whenever a spot check indicates a significant change, as specified in the qualified expert's spot check design, in the operating characteristics of a machine, the machine must be recalibrated as required in paragraph (a).

(6) A log must be kept of all spot-check measurements.

(c) In the therapeutic application of X-ray equipment constructed with beryllium or other low-filtration windows, the registrant must ensure that the unfiltered radiation reaches only the part intended and that the useful beam port is blocked at all times except when actually being used.

(d) Therapeutic radiation machines must not be left unattended unless the locking device, required by paragraph (e) of subsection 4 of NAC 459.588, is set to prevent activation of the useful beam.

(e) Except as provided in paragraph (f) of subsection ~~4~~ 3 of NAC 459.554, no person other than the patient may be in the treatment room during exposures unless he or she is protected by a barrier sufficient to meet the requirements of NAC 459.325, and no person other than the patient may be in the treatment room when the kVp exceeds 150 during exposures except in emergency situations.

(f) The tube housing assembly must not be held by anyone during exposures.

(g) When a patient must be held in position for radiation therapy, mechanical restraining devices must be used.

Sec. 9. Chapter 653 of NAC is hereby amended by adding thereto the provisions set forth as sections 10 to 14, inclusive, of this regulation.

Sec. 10. *“Rural authorization” means a rural authorization issued pursuant to section 27 of LCB File No. R074-19.*

Sec. 11. 1. *Chapter 10 of the Health Center Compliance Manual, 2018 edition, published by the Health Resources and Services Administration of the United States Department of Health and Human Services, is hereby adopted by reference. The publication is available at no charge from the Health Resources and Services Administration at the Internet address <https://bphc.hrsa.gov/programrequirements/compliancemanual/chapter-10.html#titletop> or, if that Internet website ceases to exist, from the Division.*

2. *The ARRT Standards of Ethics, published on September 1, 2019, by the American Registry of Radiologic Technologists, is hereby adopted by reference. The publication is*

available at no charge from the American Registry of Radiologic Technologists at the Internet address https://www.arrt.org/docs/default-source/governing-documents/arrt-standards-of-ethics.pdf?sfvrsn=c79e02fc_24 or, if that Internet website ceases to exist, from the Division.

3. If the publication adopted by reference in subsection 1 or 2 is revised, the Division must review the revision to determine its suitability for this State. If the Division determines that the revision is not suitable for this State, the Division must consult with the Radiation Therapy and Radiologic Imaging Advisory Committee created by NRS 653.450. If the Division does not revise its determination after consulting the Committee, the Division must hold a public hearing to review its determination and give notice of that hearing within 90 days after the date of publication of the revision. If, after the hearing, the Division does not revise its determination, the Division must give notice that the revision is not suitable for this State within 90 days after the hearing. If the Division does not give such notice, the revision becomes part of the publication adopted by reference pursuant to subsection 1 or 2, as applicable.

Sec. 12. 1. An application for the issuance or renewal of registration to continue performing computed tomography or fluoroscopy pursuant to NRS 653.620 must include, without limitation:

(a) Proof acceptable to the Division that the applicant performed computed tomography or fluoroscopy as part of his or her employment on January 1, 2020, and has continuously performed computed tomography or fluoroscopy after that date; and

(b) Documentation acceptable to the Division of the applicant's scope of practice on and after January 1, 2020.

2. A registration to continue performing computed tomography or fluoroscopy issued pursuant to NRS 653.620 expires 2 years after the date on which the registration was issued and must be renewed on or before that date.

Sec. 13. *1. A rural health clinic or federally-qualified health center that employs the holder of a rural authorization or for which such a person serves as an independent contractor must establish a quality assurance program for X-ray photographs that meets the requirements prescribed by the publication adopted by reference pursuant to subsection 1 of section 11 of this regulation.*

2. The rural health clinic or federally-qualified health center shall make documentation of the quality assurance program available to the Division upon request.

Sec. 14. *1. A registration issued pursuant to NRS 653.610 to engage in radiation therapy or radiologic imaging outside the scope of practice authorized for a holder of a license or limited license expires on the date on which the holder's license or limited license, as applicable, expires.*

2. A registration to perform computed tomography issued pursuant to NRS 653.630 expires on the date on which the holder's license expires.

Sec. 15. Section 5 of LCB File No. R074-19 is hereby amended to read as follows:

Section 5. As used in this chapter, unless the context otherwise requires, the words and terms defined in sections 6 to 16, inclusive, of LCB File No. R074-19 *and section 10 of this regulation* have the meanings ascribed to them in those sections.

Sec. 16. Section 20 of LCB File No. R074-19 is hereby amended to read as follows:

Section 20. *1. Except as otherwise provided in subsection 3:*

(a) A person who is applying to the Division for the issuance or renewal of a license or a limited license pursuant to NRS 653.310 to 653.910, inclusive, *a rural authorization or a registration to perform computed tomography or fluoroscopy pursuant to subsection 3 of NRS 653.620* shall pay the applicable fee for the issuance or renewal of a license, ~~or~~ limited license, *rural authorization or registration* which is set forth in this section.

~~2.~~ (b) Before issuing or renewing a license, ~~or a~~ limited license, *rural authorization or registration to perform computed tomography or fluoroscopy*, the Division shall charge and collect the issuance or renewal fee which is set forth in this section.

~~3.~~ 2. The Division shall charge and collect the following fees:

For the issuance or renewal of a license or a limited license pursuant to NRS 653.510 or 653.520	200
For the issuance or renewal of a license or a limited license pursuant to NRS 653.530 or 653.540	200
For issuance of a provisional license	25
For issuance of a temporary student license pursuant to subsection 3 of NRS 653.610	25
For issuance of a duplicate license or a duplicate limited license	25
For the issuance or renewal of a rural authorization pursuant to section 27 of LCB File No. R074-19	50
For the issuance or renewal of a registration to perform computed tomography or fluoroscopy if the person performed computed tomography or fluoroscopy as part of his or her employment on January 1, 2020, as provided in subsection 3 of NRS 653.620	200

~~14.1~~ 3. *An applicant for the issuance of a license or limited license is not required to pay a fee pursuant to this section if the applicant holds a certificate to operate a radiation machine for mammography pursuant to NRS 457.183.*

4. If the payment of an applicable fee was made in error, the Division shall refund the fee collected pursuant to subsection ~~13.1~~ 2. The Division may deduct from this refund amount an amount that is calculated to cover the administrative costs related to the issuance of the refund.

Sec. 17. Section 21 of R074-19 is hereby amended to read as follows:

Section 21. 1. For the purpose of defining the scope of practice pursuant to paragraph (b) of subsection 1 of NRS 653.460:

~~11.1~~ (a) A radiologist assistant who is authorized to practice pursuant to NRS 653.600:

~~11(a)~~ (1) May perform any duties relating to the care and management of patients, including, without limitation, radiologic imaging and interventional procedures guided by radiologic imaging, under the supervision of a radiologist who is certified by the American Board of Radiology, or its successor organization, or the American Osteopathic Board of Radiology, or its successor organization, in the areas of patient care, patient management, clinical imaging and interventional procedures.

~~11(b)~~ (2) May provide initial observations concerning the images of a patient to a supervising physician who specializes in radiology.

~~11(e)~~ (3) Shall not interpret images, make diagnoses, prescribe medication or therapies or otherwise engage in the practice of medicine, as defined in NRS 630.020.

(4) Shall perform his or her duties in accordance with the Standards of Ethics adopted by reference in subsection 2 of section 11 of LCB File No. R043-20.

~~12.1~~ (b) A person who holds a license to engage in radiation therapy issued pursuant to NRS 653.310 to 653.910, inclusive ~~may~~ :

~~(a) Administer~~ (1) *May administer* ionizing radiation emitted from X-ray machines, particle accelerators or sealed radioactive sources to human beings for therapeutic purposes.

~~(b) Perform~~ (2) *May perform* simulation, procedures related to treatment planning, treatment delivery and dosimetric calculations as prescribed by a physician who is certified in radiation oncology by the American Board of Radiology, or its successor organization, or the American Osteopathic Board of Radiology, or its successor organization.

~~(c) Participate~~ (3) *May participate* in procedures involving brachytherapy.

(4) *Shall perform his or her duties in accordance with the Standards of Ethics adopted by reference in subsection 2 of section 11 of LCB File No. R043-20.*

~~13.1~~ (c) A person who holds a license to engage in radiologic imaging issued pursuant to NRS 653.310 to 653.910, inclusive ~~may~~ :

~~(a) While~~ (1) *May, while* under the supervision of a licensed practitioner, if applicable, use ionizing radiation for diagnostic purposes or to visualize a medical condition by applying the ionizing radiation emitted from X-ray machines to any part of the human body.

~~(b) In~~ (2) *May, in* conjunction with the study of radiation, administer contrast agents and related drugs for diagnostic purposes.

~~(c) Perform~~ (3) *May perform* diagnostic radiographic and noninterpretive fluoroscopic procedures, as prescribed by a licensed practitioner, and may assist the licensed practitioner with fluoroscopic and specialized radiologic procedures.

(4) *Shall perform his or her duties in accordance with the Standards of Ethics adopted by reference in subsection 2 of section 11 of LCB File No. R043-20.*

~~{4.}~~ (d) A person who holds a limited license to engage in radiologic imaging issued pursuant to NRS 653.520, 653.530 or 653.540, as applicable ~~{, may:}~~ :

~~{(a) Perform}~~ (1) *May perform* diagnostic radiographic procedures that are prescribed by a licensed practitioner on the specific areas of interest that are within the scope of practice of such a person.

~~{(b) Assist}~~ (2) *May assist* a licensed practitioner or radiographer during static radiographic procedures.

~~{(c) Perform}~~ (3) *May perform* radiographic examinations within the scope of practice of such a person.

(4) *Shall perform his or her duties in accordance with the Standards of Ethics adopted by reference in subsection 2 of section 11 of LCB File No. R043-20.*

2. *A person who holds a rural authorization or any registration issued pursuant to this chapter and chapter 653 of NRS shall perform his or her duties in accordance with the Standards of Ethics adopted by reference in subsection 2 of section 11 of LCB File No. R043-20.*

Sec. 18. Section 22 of LCB File No. R074-19 is hereby amended to read as follows:

Section 22. 1. To renew his or her license, limited license or rural authorization, the license holder or person who holds a rural authorization ~~{issued pursuant to section 27 of LCB File No. R074-19}~~ shall maintain and provide to the Division evidence that he or she has completed not less than the required amount of continuing education credits set forth in this section.

2. ~~{If applicable, the license holder or person who holds a rural authorization issued pursuant to section 27 of LCB File No. R074-19}~~ *A person who holds a license or limited*

license shall provide to the Division ~~the~~ as documentation of his or her continuing education credits:

(a) A copy of valid certification issued by a national professional organization that indicates, as a requirement to maintain the certification, that the holder has completed continuing education that meets or exceeds the requirements prescribed by subsection 7 or 8, as applicable; or

(b) A certificate or list for the continuing education credits that is provided by American Registry for Radiologic Technologists, or its successor organization, or the Nuclear Medicine Technology Certification Board, or its successor organization ~~+~~, or another organization that meets the requirements of subsection 6 and is approved by the Division.

3. ~~The license holder or~~ A person who holds a rural authorization ~~issued pursuant to section 27 of LCB File No. R074-19~~ shall provide to the Division ~~+~~ *in addition to the information required in subsection 2, if applicable, the following information concerning documentation of his or her continuing education credits ~~+~~ that includes, without limitation:*

- (a) The name of the participant;
- (b) The date or dates of attendance;
- (c) The title and content of the continuing education activity;
- (d) The number of continuing education credit hours earned; and
- (e) The name of the organization sponsoring or providing the continuing education activity.

4. A continuing education activity that lasts longer than 1 contact hour is assigned whole or partial continuing education credit based on the contact hour.

5. A continuing education activity that lasts for 30 minutes or less must receive no continuing education credit.

6. All continuing education activities must be evaluated and certified by a recognized continuing education evaluation mechanism. For an organization to qualify as a recognized continuing education mechanism, the organization must be:

- (a) National in scope;
- (b) A nonprofit entity; and
- (c) Radiology-based or medical imaging-based.

7. A person who holds a license ~~to engage in radiation therapy and radiologic imaging issued pursuant to NRS 653.510, 653.530 or 653.540, as applicable,~~ must complete the applicable continuing education credits listed below before renewing his or her license:

- (a) If the person holds a license to engage in radiation therapy, he or she must complete 24 continuing education credits.
- (b) If the person holds a license to engage in radiologic imaging, he or she must complete 24 continuing education credits.
- (c) If the person practices as a radiologist assistant, he or she must complete 50 continuing education credits.

8. A person who holds a limited license ~~to engage in radiologic imaging issued pursuant to NRS 653.520, 653.530 or 653.540, as applicable,~~ must complete 20 continuing education credits relating to category A or A+, as established by the American Registry for Radiologic Technologists, before renewing his or her limited license.

9. A person who holds a rural authorization ~~issued pursuant to section 27 of LCB File No. R074-19~~ must complete 20 continuing education credits relating to category A or A+, as established by the American Registry for Radiologic Technologists, before renewing his or her rural authorization.

10. As used in this section, “recognized continuing education evaluation mechanism” is a radiology-based or medical imaging-based organization that the American Registry for Radiologic Technologists has approved to evaluate the content, quality and integrity of proposed continuing education activities. Such evaluation includes, without limitation, the evaluation of the educational objectives of a continuing education activity, content relevancy and assurance, faculty qualifications and education methods and materials. The following organizations have the recognized continuing education evaluation mechanism status:

- (a) American College of Radiology;
- (b) American Healthcare Radiology Administrators;
- (c) American Institute of Ultrasound in Medicine;
- (d) American Roentgen Ray Society;
- (e) American Society of Nuclear Cardiology;
- (f) American Society of Radiologic Technologists;
- (g) Association of Vascular and Interventional Radiographers;
- (h) Canadian Association of Medical Radiation Technologists;
- (i) Medical Dosimetrist Certification Board;
- (j) Radiological Society of North America;
- (k) Society of Diagnostic Medical Sonography;
- (l) Society for Magnetic Resonance Technologists of International Society for Magnetic Resonance in Medicine;
- (m) Society of Nuclear Medicine and Molecular Imaging Technologist Section; and
- (n) Society for Vascular Ultrasound.

Sec. 19. Section 27 of LCB File No. R074-19 is hereby amended to read as follows:

Section 27. 1. A person who seeks to take X-ray photographs pursuant to subsections 1 and 2 of NRS 653.620 must be issued a rural authorization by the Division before taking such X-ray photographs.

2. To be issued the rural authorization that is required pursuant to subsection 1, a person must:

(a) Submit to the Division a completed application form for rural authorization;

(b) Pay the fee for the issuance of a rural authorization set forth in section 20 of LCB File No. R074-19;

(c) Submit to the Division a completed and signed statement prescribed by the Division of Welfare and Supportive Services of the Department of Health and Human Services pursuant to NRS 425.520;

(d) *Submit to the Division proof that the person will be employed or serve as an independent contractor in a rural health clinic or federally-qualified health center that has established a quality assurance program for X-ray photographs that meets the requirements adopted by reference in subsection 1 of section 11 of LCB File No. R043-20;*

(e) Attest to knowledge of and compliance with the guidelines of the Centers for Disease Control and Prevention concerning the prevention of transmission of infectious agents through safe and appropriate injection practices; and

~~(e)~~ (f) Provide any additional information that the Division requests.

3. A rural authorization issued pursuant to subsection 1 expires 2 years after the date on which the rural authorization was issued and must be renewed.

4. To renew a rural authorization issued pursuant to subsection 1, the person who holds the rural authorization must:

(a) Submit to the Division a completed application form for the renewal of the rural authorization;

(b) Pay the fee for the renewal of a rural authorization set forth in section 20 of LCB File No. R074-19;

(c) *Submit to the Division proof that the person will be employed or serve as an independent contractor in a rural health clinic or federally-qualified health center that has established a quality assurance program for X-ray photographs that meets the requirements adopted by reference in subsection 1 of section 11 LCB File No. R043-20;*

(d) Submit to the Division a completed and signed statement prescribed by the Division of Welfare and Supportive Services of the Department of Health and Human Services pursuant to NRS 425.520;

~~(d)~~ (e) Attest to knowledge of and compliance with the guidelines of the Centers for Disease Control and Prevention concerning the prevention of transmission of infectious agents through safe and appropriate injection practices;

~~(e)~~ (f) Complete the applicable continuing education requirements set forth in section 22 of LCB File No. R074-19; and

~~(f)~~ (g) Provide any additional information that the Division requests.

Sec. 20. NAC 459.448 is hereby repealed.

TEXT OF REPEALED SECTION

459.448 “Gonadal shield” defined. (NRS 459.201) “Gonadal shield” means a protective barrier for the testes or ovaries.