

**Technical Amendment**  
**September 28, 2023**

**201 KAR 46:081. Limited X-Ray machine operator.**

RELATES TO: KRS 311B.020, 311B.150, 311B.100(2), 311B.110, 311B.120, 311B.180, 311B.190

STATUTORY AUTHORITY: KRS 311B.050, 311B.100(2), 311B.110

NECESSITY, FUNCTION, AND CONFORMITY: KRS 311B.050 requires the Board of Medical Imaging and Radiation Therapy to promulgate administrative regulations to establish the procedures for the issuance and renewal of a license. KRS 311B.100(2) and KRS 311B.110(6) require the board to promulgate administrative regulations to establish the qualifications for a limited x-ray machine operator. This administrative regulation establishes the requirements for the licensure of a limited x-ray machine operator.

Section 1. Applicability. This administrative regulation shall apply to individuals who perform limited diagnostic radiography while under the direct supervision or indirect supervision of a licensed practitioner of the healing arts.

Section 2. Limited Licensee Employment Prohibition. An individual who holds a limited license shall not be employed as an operator of a source of radiation at a facility where contrast studies, fluoroscopy, mammography, computed tomography, magnetic resonance imaging, bedside radiography, nuclear medicine, positron emission tomography, or radiation therapy procedures are performed.

Section 3. Pathway to the Limited X-ray Machine Operator License.

- (1) An applicant shall complete an approved postsecondary educational program that meets the American Society of Radiologic Technologists (ASRT) Limited X-Ray Machine Operator Curriculum requirements. An individual shall complete a formal education program for limited x-ray machine operators approved by the board.
- (2) If an applicant qualifies for licensure under KRS 12.245, 12.354, or 12.357, the applicant shall submit and satisfy the requirements of Section 5(1) through (6) of this administrative regulation, and shall submit form DD-214 or other proof of active or prior military service for the applicant or spouse of the applicant.

Section 4. Application for Temporary Limited X-ray Machine Operator License.

- (1) An applicant who has completed a formal educational program shall submit:
  - (a) A completed and signed application Form KBMIRT Form 5;
  - (b) A nonrefundable, non-transferrable temporary limited x-ray machine operator application and license fee as mandated in 201 KAR 46:020, Section 5, unless the fee is waived in accordance with KRS 311B.140;
  - (c) The satisfactory results of a criminal background check completed within the past six (6) months in state of residence and employment and any other state of residence and employment within the past five (5) years; and
  - (d) A copy of a government-issued photo ID.
- (2) The temporary limited x-ray machine operator license shall be effective for up to one (1) year from date of program completion and shall not be renewable.
- (3) Upon completion of the limited x-ray machine operator training program, individuals shall:
  - (a) Apply for the limited scope radiography exam; and
  - (b) Submit the nonrefundable, non-transferrable limited x-ray machine operator examination fee as mandated in 201 KAR 46:020, Section 9.
- (4) An individual shall successfully pass the American Registry of Radiologic Technologists (ARRT) administered limited scope radiography exam within one (1)

calendar year of program completion and prior to the expiration date of the temporary license, except in the case of instances such as, disability, major illness, accident, or if an active duty member of the Armed Forces of the United States.

(5) If a temporary licensee has successfully passed the ARRT administered limited scope radiography exam prior to the expiration date of the temporary license, the licensee shall be issued a limited x-ray machine operator license which shall expire on the last day of the licensee's birth month. If the limited x-ray machine operator license is first issued to an individual less than six (6) months before the individual's birth month, the license issued to the individual shall not expire on that date, but instead it shall expire at the last day of the individual's birth month in the following calendar year.

Section 5. Application for Initial Limited X-ray Machine Operator License. An Applicant shall submit:

- (1) A completed and signed application, KBMIRT Form 4;
- (2) A nonrefundable initial application and license fee as established in 201 KAR 46:020, Section 1, unless the fee is waived in accordance with KRS 311B.140;
- (3) The results of a criminal background check completed within the past six (6) months in the state of residence and employment, and any other state of residence and employment within the past five (5) years;
- (4) A copy of government-issued photo ID;
- (5) Documentation of passing results of the ARRT administered limited scope radiography exam within one (1) calendar year of program completion, except in the case of instances such as, disability, major illness, accident, or if an active duty member of the Armed Forces of the United States; and
- (6) Verification of graduation from a formal education program for limited x-ray machine operators approved by the board.

Section 6. The issued license shall identify the licensee as a limited x-ray machine operator. The license shall also identify the category as general, bone densitometry, or podiatry.

Section 7. Curricular Standards for Formal Educational Program. This administrative regulation applies to institutions offering a postsecondary program for limited x-ray machine operators.

- (1) Programs for general limited x-ray machine operators shall:
  - (a) Meet the curricular standards established by the American Society of Radiologic Technologists (ASRT);
  - (b) Include a minimum of 240 classroom hours of didactic instruction and 360 clinical hours of education which shall include supervised practice and demonstration of clinical competency;
  - (c) Supply data requested for a complete evaluation of its administration, organization, faculty, physical facilities, student policies, and curriculum;
  - (d) Provide a structured curriculum with clearly written course descriptions, lesson plans, and objectives;
  - (e) Provide an adequate faculty, which shall be qualified through academic preparation or experience to teach the subjects assigned;
  - (f) Have a program director who is a licensed radiographer with a minimum of three (3) years of clinical or teaching experience or a combination of clinical and teaching experience;
  - (g) Provide a licensee-to-student ratio consistent with professional educational guidelines in the appropriate field of practice;
  - (h) Provide appropriate facilities, sufficient volume, and a variety of diagnostic exams to properly conduct the educational program;

- (i) Prohibit students from applying radiation to human beings for diagnostic purposes until they have obtained practical experience and have had their performance evaluated as satisfactory by the program faculty;
  - (j) Provide direct or indirect supervision by a licensed practitioner of the healing arts or a licensee as required by the student's level of competency;
  - (k) Prohibit students from administering radiation to a human being unless under direct or indirect supervision as required by the student's level of competency;
  - (l) Maintain records of each student's attendance, grades, clinical competency, and subjects completed;
  - (m) Designate a radiation safety officer; and
  - (n) Permit site inspections by the board's representative.
- (2) Programs for limited podiatry x-ray machine operators shall:
- (a) Consist of instruction that reflects current modules of the Examination Content Specifications - Limited Scope of Practice in Radiography published by the ARRT. The curriculum shall include items such as:
    - 1. Safety, including radiation physics; radiation protection, including personnel protection; radiation exposure, monitoring, and radiation units; biological effects of radiation; low-dose technique and minimizing patient exposure; applicable federal and state radiation regulations;
    - 2. Image Production, including principle of the radiographic equipment; image acquisition and technical evaluation; equipment operation and quality assurance; developing and using technique charts; and
    - 3. Patient Care, including patient interactions and management; and
  - (b) Consist of at least six (6) months of clinical experience of foot and ankle limited x-ray procedures while under the direct supervision of a licensed practitioner of the healing arts, a licensed radiologic technologist, or a licensed limited x-ray machine operator.
- (3) Programs for limited bone densitometry x-ray machine operators shall:
- (a) Consist of instruction that reflects current content categories of the Examination Content Specifications - Bone Densitometry Equipment Operator published by the ARRT. The curriculum shall include items such as:
    - 1. Patient Care, including osteoporosis, bone physiology, bone health and patient education, and patient preparation;
    - 2. Safety, including fundamental principles, biological effects of radiation, units of measurement, and radiation protection; and
    - 3. Image Production, including fundamentals of x-ray production, quality control, measuring and determining quality in bone mineral density; and
  - (b) Consist of at least six (6) months of bone densitometry clinical experience under the direct supervision of a licensed practitioner of the healing arts, a licensed radiologic technologist, or a licensed limited x-ray machine operator.

Section 8. Approved Radiographic Procedures for the Limited X-ray Machine Operator. An individual who holds a limited license is limited to performing the procedures authorized for his or her license as described in subsections (1), (2), and (3) of this section.

- (1) An individual holding a general limited x-ray machine operator license shall perform only the following:
- (a) Radiography of the thorax, lungs and ribs;
  - (b) Radiography of the abdomen;
  - (c) Radiography of the skull and facial structures;
  - (d) Radiography of the upper and lower extremities;
  - (e) Radiography of the pectoral girdle, hips, and pelvis; and
  - (f) Radiography of the cervical, thoracic, and lumbar spines.

(2) An individual holding a limited podiatry x-ray machine operator license shall perform radiographic procedures on the foot and ankle only.

(3) An individual holding a limited bone densitometry x-ray machine operator license shall perform bone densitometry radiographic procedures only.

(4) A limited x-ray machine operator shall comply with the Limited X-ray Machine Operator Practice Standards as incorporated by reference in 201 KAR 46:035, Section 4.

Section 9. Continuing Education Requirements. Licensees shall complete and document twelve (12) hours of continuing education biennially as required by 201 KAR 46:060. A minimum of six (6) hours shall be related to radiation safety or medical imaging.

Section 10. Continuing Education Audit Process.

(1) The board shall select a sample of twenty-five (25) percent of limited x-ray machine operator licensees to audit for continuing education compliance annually.

(2) The board shall send each licensee selected for audit a notification of audit.

(3) Each licensee shall maintain his or her personal files such as certificates or records of credit from approved continuing education programs from the current biennium and immediate prior biennium.

(4) A licensee selected for audit shall complete KBMIRT Form 8, as incorporated by reference in 201 KAR 46:060, and provide the board with a copy of his or her certificates or records of completion.

(5) Failure to comply with an audit may result in nonrenewal, suspension or revocation of license.

Section 11. Renewal of License. A licensee shall renew annually prior to the expiration of his or her current license, which is the last day of the licensee's birth month, by:

(1) Completing KBMIRT Form 6; and

(2) Submitting the Renewal License Fee in accordance with 201 KAR 46:020, Section 2, unless the fee is waived in accordance with KRS 311B.140.

Section 12. Reinstatement of Lapsed License. A licensee who has allowed the license to lapse for up to twelve (12) months is eligible to be reinstated upon submission of KBMIRT Form 6, documentation of twelve (12) hours of continuing education, and the payment of reinstatement and renewal fees pursuant to 201 KAR 46:020, Sections 2 and 7, unless the fees are waived in accordance with KRS 311B.140. A licensee whose license has lapsed for more than twelve (12) months shall:

(1) Successfully pass the ARRT limited scope radiography examination;

(2) Submit a completed and signed application KBMIRT Form 4;

(3) Submit a nonrefundable initial application and license fee and reinstatement fee as mandated in 201 KAR 46:020, Sections 1 and 7, unless the fees are waived in accordance with KRS 311B.140;

(4) Submit satisfactory results of a criminal background check completed within the past six (6) months in state of residence and employment and any other state of residence and employment within the past five (5) years; and

(5) Submit a copy of a government-issued photo ID.

Section 13. Incorporation by Reference.

(1) The following material is incorporated by reference:

(a) KBMIRT Form 4, "Limited X-ray Machine Operator License Application", October 2023~~[August 2020]~~;

(b) KBMIRT Form 5, "Temporary Limited X-ray Machine Operator License Application", October 2023~~[August 2020]~~;

(c) KBMIRT Form 6, "Limited X-ray Machine Operator Renewal Application", October 2023~~[August 2020]~~;

(d) "Examination Content Specifications - Limited Scope of Practice in Radiography", January 2018; and

(e) "Examination Content Specifications - Bone Densitometry Equipment Operator", January 2018.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Board of Medical Imaging and Radiation Therapy, 2365 Harrodsburg Road, Suite A220, Lexington, Kentucky, 40504~~[125 Holmes Street, Suite 320, Frankfort, Kentucky 40601]~~, Monday through Friday, 8 a.m. to 4:30 p.m.

(34 Ky.R. 145; 610; 771; eff. 10-17-2007; Recodified from 902 KAR 105:081, 11-20-2013; 41 Ky.R. 2309; 42 Ky.R. 1498; eff. 11-18-2015; TAm eff. 11-30-2017; 44 Ky.R. 1390; 1819; eff. 2-15-2018; TAm eff. 9-28-2018; 45 Ky.R. 2976; eff. 7-5-2019; 46 Ky.R. 3006; 47 Ky.R. 711; eff. 10-28-2020; TAm eff. 9-28-2023.)