144.121 X-RAY MACHINES; OTHER SOURCES OF IONIZING RADIATION.

Subdivision 1. Registration; fees. The fee for the registration for x-ray machines and other sources of ionizing radiation required to be registered under rules adopted by the state commissioner of health pursuant to section 144.12, shall be in an amount as described in subdivision 1a pursuant to section 144.122. The registration shall expire and be renewed as prescribed by the commissioner pursuant to section 144.122.

Subd. 1a. Fees for ionizing radiation-producing equipment. (a) A facility with ionizing radiation-producing equipment must pay an annual initial or annual renewal registration fee consisting of a base facility fee of $100 and an additional fee for each radiation source, as follows:

1. medical or veterinary equipment $100
2. dental x-ray equipment $40
3. x-ray equipment not used on humans or animals $100
4. devices with sources of ionizing radiation not used on humans or animals $100
5. security screening system $100

(b) A facility with radiation therapy and accelerator equipment must pay an annual registration fee of $500. A facility with an industrial accelerator must pay an annual registration fee of $150.

(c) Electron microscopy equipment is exempt from the registration fee requirements of this section.

(d) For purposes of this section, a security screening system means radiation-producing equipment designed and used for security screening of humans who are in the custody of a correctional or detention facility, and used by the facility to image and identify contraband items concealed within or on all sides of a human body. For purposes of this section, a correctional or detention facility is a facility licensed under section 241.021 and operated by a state agency or political subdivision charged with detection, enforcement, or incarceration in respect to state criminal and traffic laws.

Subd. 1b. Penalty fee for late registration. Applications for initial or renewal registrations submitted to the commissioner after the time specified by the commissioner shall be accompanied by an amount equal to 25 percent of the fee due in addition to the fees prescribed in subdivision 1a.

Subd. 1c. [Repealed, 2007 c 85 s 5]

Subd. 2. Inspections. Periodic radiation safety inspections of the sources of ionizing radiation shall be made by the state commissioner of health. The frequency of safety inspections shall be prescribed by the commissioner on the basis of the frequency of use of the source of ionizing radiation; provided that each source shall be inspected at least once every four years.

Subd. 3. Exemption. Notwithstanding rules adopted by the commissioner under section 144.12, subdivision 1, clause (15), practitioners of veterinary medicine are not required to conduct densitometry and sensitometry tests as part of any ionizing radiation quality assurance program.

Subd. 4. [Repealed, 2007 c 85 s 5]
Subd. 5. Examination for individual operating x-ray equipment. (a) After January 1, 2008, an individual in a facility with x-ray equipment for use on humans that is registered under subdivision 1 may not operate, nor may the facility allow the individual to operate, x-ray equipment unless the individual has passed a national examination for limited x-ray machine operators that meets the requirements of paragraphs (b) and (c) and is approved by the commissioner of health.

(b) The commissioner shall establish criteria for the approval of examinations based on national standards, such as the examination in radiography from the American Registry of Radiologic Technologists, the examination for limited scope of practice in radiography from the American Registry of Radiologic Technologists for limited x-ray machine operators, and the American Registry of Chiropractic Radiography Technologists for limited radiography in spines and extremities; or equivalent examinations approved by other states. Equivalent examinations may be approved by the commissioner, if the examination is consistent with the standards for educational and psychological testing as recommended by the American Education Research Association, the American Psychological Association, the National Council on Measurement in Education, or the National Commission for Certifying Agencies. The organization proposing the use of an equivalent examination shall submit a fee to the commissioner of $1,000 per examination to cover the cost of determining the extent to which the examination meets the examining standards. The collected fee shall be deposited in the state treasury and credited to the state government special revenue fund.

(c) The examination for limited x-ray machine operators must include:

(1) radiation protection, equipment maintenance and operation, image production and evaluation, and patient care and management; and

(2) at least one of the following regions of the human anatomy: chest, extremities, skull and sinus, spine, or ankle and foot. The examinations must include the anatomy of, and positioning for, the specific regions.

(d) A limited x-ray operator who is required to take an examination under this subdivision must submit to the commissioner an application for the examination, a $25 processing fee, and the required examination fee set by the national organization offering the examination. The processing fee and the examination fee shall be deposited in the state treasury and credited to the state government special revenue fund. The commissioner shall submit the fee to the national organization providing the examination.

Subd. 5a. Limited x-ray machine operator practice. (a) A limited x-ray operator may only practice medical radiography on limited regions of the human anatomy for which the operator has successfully passed an examination identified in subdivision 5, unless the operator meets one of the exemptions described in paragraph (b). The operator may practice using only routine radiographic procedures, for the interpretation by and under the direction of a qualified practitioner, excluding computed tomography, the use of contrast media, and the use of fluoroscopic or mammographic equipment.

(b) This subdivision does not apply to:

(1) limited x-ray machine operators who passed the examination that was required before January 1, 2008;

(2) certified radiologic technologists, licensed dental hygienists, registered dental assistants, certified registered nurse anesthetists, and registered physician assistants;

(3) individuals who are licensed in Minnesota to practice medicine, osteopathic medicine, chiropractic, podiatry, or dentistry;
(4) individuals who are participating in a training course in any of the occupations listed in clause (2), (3), or (5) for the duration and within the scope of the training course; and

(5) cardiovascular technologists who assist with the operation of fluoroscopy equipment if they:

(i) are credentialed by Cardiovascular Credentialing International as a registered cardiovascular invasive specialist or as a registered cardiac electrophysiology specialist, are a graduate of an education program accredited by the Commission on Accreditation of Allied Health Education Programs, which uses the standards and criteria established by the Joint Review Committee on Education in Cardiovascular Technology, or are designated on a variance granted by the commissioner, effective July 31, 2019; and

(ii) are under the personal supervision and in the physical presence of a qualified practitioner for diagnosing or treating a disease or condition of the cardiovascular system in fluoroscopically guided interventional procedures. Cardiovascular technologists may not activate the fluoroscopic system or evaluate quality control tests.

Subd. 5b. **Variance of scope of practice.** The commissioner may grant a variance according to Minnesota Rules, parts 4717.7000 to 4717.7050, to a facility for the scope of practice of an x-ray operator in cases where the delivery of health care would otherwise be compromised if a variance were not granted. The request for a variance must be in writing, state the circumstances that constitute hardship, state the period of time the facility wishes to have the variance for the scope of practice in place, and state the alternative measures that will be taken if the variance is granted. The commissioner shall set forth in writing the reasons for granting or denying the variance. Variances granted by the commissioner must specify in writing the time limitation and required alternative measures to be taken by the facility. A request for the variance shall be denied if the commissioner finds the circumstances stated by the facility do not support a claim of hardship, the requested time period for the variance is unreasonable, the alternative measures proposed by the facility are not equivalent to the scope of practice, or the request for the variance is not submitted to the commissioner in a timely manner.

Subd. 6. **Inspection.** At the time a facility with x-ray equipment is inspected by the commissioner of health in accordance with subdivision 2, an individual operating x-ray equipment in the facility must be able to show compliance with the requirements of subdivision 5.

Subd. 7. [Repealed, 1999 c 86 art 2 s 6]

Subd. 8. **Exemption from examination requirements; operators of certain bone densitometers.** (a) This subdivision applies to a bone densitometer that is used on humans to estimate bone mineral content and bone mineral density in a region of a finger on a person's nondominant hand, gives an x-ray dose equivalent of less than 0.001 microsieverts per scan, and has an x-ray leakage exposure rate of less than two milliroentgens per hour at a distance of one meter, provided that the bone densitometer is operating in accordance with manufacturer specifications.

(b) An individual who operates a bone densitometer that satisfies the definition in paragraph (a) and the facility in which an individual operates such a bone densitometer are exempt from the requirements of subdivisions 5 and 6.

Subd. 9. **Exemption from examination requirements; operators of security screening systems.** (a) An employee of a correctional or detention facility who operates a security screening system and the facility in which the system is being operated are exempt from the requirements of subdivisions 5 and 6.

(b) An employee of a correctional or detention facility who operates a security screening system and the facility in which the system is being operated must meet the requirements of a variance to Minnesota
Rules, parts 4732.0305 and 4732.0565, issued under Minnesota Rules, parts 4717.7000 to 4717.7050. This paragraph expires on December 31 of the year that the permanent rules adopted by the commissioner governing security screening systems are published in the State Register.

**History:** 1974 c 81 s 1; 1975 c 310 s 35; 1977 c 305 s 45; 1985 c 248 s 70; 1993 c 188 s 1,2; 1995 c 146 s 1-3; 1997 c 203 art 2 s 7-10; 1999 c 245 art 2 s 20; 2007 c 85 s 2,3; 2007 c 123 s 1-3; 2008 c 277 art 1 s 13; 2009 c 79 art 10 s 2,3; 2013 c 125 art 1 s 108; 2016 c 119 s 7; 2019 c 17 s 1; 1Sp2019 c 9 art 11 s 15,16