

**641—42.2(136C) Definitions.**

“*ARRT*” means the American Registry of Radiologic Technologists.

“*Authorized user*” means an Iowa-licensed physician identified on a specific radioactive materials license or a license of broad scope as defined in 641—subrule 41.2(2).

“*Body composition scan*” means the use of a low dose X-ray to generate images of a color-coded body map.

“*Bone densitometry*” means the art and science of applying ionizing radiation to the human body using a dual energy X-ray absorptiometry unit for the sole purpose of measuring bone density.

“*Category*” defines specific duties allowed in the limited radiologic technologist permit classification.

“*Classification*” means a specific class of permit that allows the permit holder to perform the duties specified for that permit class.

“*Computed tomography*” or “*CT*” means a technique for generating a series of X-ray images taken from different angles and processed with computer software.

1. “*Diagnostic computed tomography*” means the use of computed tomography to create cross-sectional images of the human body to be used for diagnosis.

2. “*Attenuation correction*” means the use of X-rays from a CT scan to construct an attenuation map of density differences throughout the body that can then be used to correct for the absorption of the photons emitted from Fluorodeoxyglucose (18F) decay during a PET/CT scan.

“*Continuing education activity*” means a learning activity that is recognized as continuing education by the ARRT or NMTCB.

“*Department*” means the Iowa department of public health.

“*Expiration date*” means 11:59 p.m. on the stated date.

“*Formal education*” means a course of classroom and clinical instruction which meets the training standards set by the department.

“*Ionizing radiation producing machine*” or “*radiation machine*” means an assemblage of components for the controlled production of X-rays. An ionizing radiation producing machine includes minimally an X-ray high-voltage generator, an X-ray control, a tube housing assembly, a beam-limiting device, and the necessary supporting structures. Additional components which function with the system are considered integral parts of the system.

“*NMTCB*” means Nuclear Medicine Technology Certification Board.

“*Nuclear medicine diagnostic computed tomography endorsement*” means a qualification that allows a nuclear medicine technologist to perform diagnostic computed tomography of the human body as ordered by an individual authorized by Iowa law to order radiography.

“*Nuclear medicine procedure*” means any procedure utilizing radiopharmaceuticals for diagnosis or treatment of disease in human beings and any duties performed by the technologist during sealed source procedures, and includes, but is not limited to:

1. Administration of any radiopharmaceutical to human beings for diagnostic purposes.
2. Administration of radioactive material to human beings for therapeutic purposes.
3. Use of radioactive material for diagnostic purposes involving transmission or excitation.
4. Quality control and quality assurance.

“*Nuclear medicine technologist*” means an individual who performs nuclear medicine procedures while under the supervision of an authorized user. The classifications are as follows:

1. “*General nuclear medicine technologist*” performs any nuclear medicine procedures and may perform computed tomography for attenuation correction during PET/CT or SPECT/CT only.

2. “*Limited nuclear medicine technologist*” performs nuclear medicine procedures only as approved by the department at the time the initial permit was issued.

“*Permit*” means the document issued to an individual by the department when the individual has met the requirements of this chapter. This document authorizes the individual to perform the duties allowed for the classification of permit issued.

“*PET/CT*” means an imaging modality that uses positron emission tomography and computed tomography in one device to combine the structural anatomic information with functional data collected during the examination.

“*Radiation therapist*” means an individual who performs radiation therapy under the supervision of a radiation oncologist licensed in Iowa.

“*Radiation therapy*” means the science and art of performing simulation radiography or applying ionizing radiation emitted from X-ray machines, particle accelerators, or radioactive materials in the form of sealed sources to human beings for therapeutic purposes.

“*Radiography*” means a technique for generating and recording an X-ray pattern for the purpose of providing the user with an image(s) during or after termination of the exposure.

“*Radiologic technologist*” means an individual, excluding X-ray equipment operators, who performs radiography of the human body as ordered by an individual authorized by Iowa law to order radiography. The classifications are as follows:

1. “General radiologic technologist” performs radiography and computed tomography of any part of the human body.

2. “Limited radiologic technologist” performs radiography for the chest, spine, extremities, shoulder or pediatrics, excluding computed tomography and fluoroscopy.

3. “Limited in-hospital radiologic technologist” performs radiography of any part of the human body as approved by the department at the time the initial permit was issued.

“*Radiologist assistant*” means an advanced-level radiologic technologist who has completed the necessary requirements in order to perform procedures as outlined in ARRT guidance while under supervision of a radiologist.

“*SPECT/CT*” means an imaging modality that uses single-photon emission computed tomography and computed tomography in one device to combine the structural anatomic information with functional data collected during the examination.

“*Student*” means an individual enrolled in and participating in formal education.

“*Therapeutic*” means a medical treatment using radiation for therapy purposes.

“*X-ray equipment operator*” means an individual performing radiography of the human body using dedicated equipment as ordered by an individual authorized by Iowa law to order radiography. These individuals do not qualify for a permit in any other classification. The classifications are as follows:

1. “Podiatric X-ray equipment operator” performs radiography of only the foot and ankle using dedicated podiatric equipment. Studies using computed tomography, fluoroscopy, or nondedicated equipment are prohibited.

2. “Bone densitometry equipment operator” performs bone densitometry using only dual energy X-ray absorptiometry equipment. Studies using computed tomography, fluoroscopy, or nondedicated equipment are prohibited.

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