

Information Notice

Operation of Fluoroscopic X-ray Equipment

UPDATED 10/4/2021 TO REFLECT MINNESOTA STATUTE CHANGES

Date: March 1, 2015, updated October 4, 2021

To: Registrants who are responsible for the operation of fluoroscopic x-ray equipment on living humans

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Subject: Operation of Fluoroscopic X-ray Equipment on living humans

The Minnesota Department of Health (MDH) is issuing this Information Notice (IN) to inform registrants regarding oversight and qualification requirements for operators of fluoroscopic x-ray equipment on living humans. [Minnesota Statute 144.121](#) has specific qualification requirements for the operation of x-ray equipment on living humans and limitations have been established for operators of fluoroscopic x-ray equipment.

Discussion

MDH has identified concerns where individuals not qualified to operate fluoroscopic x-ray equipment have been operating fluoroscopic x-ray equipment on living humans.

Operator Qualifications

Operation of fluoroscopic x-ray equipment on living humans must be performed by individuals that have met one of the following qualification requirements:

- An individual that has passed the American Registry of Radiologic Technologists (ARRT) registry for radiography examination.
- A qualified practitioner who is licensed by a health-related licensing board with active practice authority and is working within the practitioner's scope of practice such as physicians, physician assistants, advanced practice registered nurse, or chiropractors.
- An X-ray Operator who has the original certificate or the original letter of passing the examination that was required prior to January 1, 2008.
- A cardiovascular technologist that meets the practice requirements under [Minnesota Statute 144.121, subdivision 5c](#).

Individuals that have passed the Limited Scope X-ray Operator (LSXO) or Bone Densitometry Equipment Operator (BDEO) examination through (ARRT) *do not* meet the minimum fluoroscopic x-ray equipment operator qualification requirements and are not qualified to operate fluoroscopic x-ray equipment.

Examples of individuals that are not qualified to operate fluoroscopic x-ray equipment include:

- Medical Assistants
- Registered Nurses
- Surgical Assistants
- Nuclear Medicine Technologist
- Radiation Therapist
- American Chiropractic Registry of Radiologic Technologists (ACRRT)

Fluoroscopic Operation

Operation of fluoroscopic x-ray equipment must be performed in the physical presence of a qualified practitioner working within the practitioner's scope of practice. Examples of a qualified practitioner are physician assistant or advanced practice registered nurse. This does not exempt the operator of x-ray equipment of the qualification requirements in Statute 144.121.

Operation of fluoroscopic x-ray equipment includes the operation of any components for the controlled production of x-rays. X-ray equipment and x-ray systems are defined in [Minnesota Rules, Chapter 4732.0110](#). These components include:

- X-ray high-voltage generator
- X-ray control
- X-ray tube housing assembly
- X-ray beam-limiting device
- The necessary supporting structures

Examples of operating x-ray equipment include:

- Positioning or repositioning of the patient table during activation of the x-ray beam
- Setting or the adjustment of the x-ray control
- Manipulating the image intensifier and x-ray tube
- Manipulating the collimators
- Making the exposure
- Evaluating quality control tests

MDH does not establish qualification requirements for individuals that perform the following:

- Move the portable x-ray equipment into a room

- Make the necessary equipment connections
- Plug the x-ray unit in
- Turn on the "power to the x-ray unit"
- Input the patient identification and examination information necessary

Conclusion

Individuals who have met specific qualification requirements are the only individuals qualified to operate fluoroscopic x-ray equipment on living humans.

Fluoroscopic x-ray equipment operations must be performed in the physical presence of a qualified practitioner working within the practitioner's scope of practice.

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