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

From: Teresa Purrington, BS, RT (R)(CT), Supervisor
X-ray Unit

Subject: Operation of fluoroscopic x-ray equipment on humans

Information Notice 2015-03
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OPERATION OF FLUOROSCOPIC X-RAY EQUIPMENT

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 humans. [Minnesota Statute 144.121](#) has specific qualification requirements for the operation of x-ray equipment on 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 humans.

Operator Qualifications

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

- An individual that is licensed in Minnesota as a physician, physician assistant, dentist, podiatrist, or chiropractor
- An individual that has met the X-ray Operator qualification requirements prior to January 1, 2008
- An individual that has passed the American Registry of Radiologic Technologists (ARRT) registry for radiography examination
- An individual that has passed the American Chiropractic Registry of Radiologic Technologists (ACRRT) registry examination

Individuals that have passed the Limited Scope X-ray Operator (LSXO) 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
- Registered Cardiovascular Invasive Specialists
- Surgical Assistants

Fluoroscopic Operation

Operation of fluoroscopic x-ray equipment must be performed in the physical presence of a licensed practitioner of the healing arts, physician assistant, registered radiologist assistant, or radiology practitioner assistant per [Minnesota Rules, Chapter 4732.0306 \(C\)](#). 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 humans. Fluoroscopic x-ray equipment operations must be performed in the physical presence of a licensed practitioner of the healing arts, physician assistant, registered radiologist assistant, or radiology practitioner assistant.

The use of unqualified individuals or the use of fluoroscopic x-ray equipment without a licensed practitioner of the healing arts, physician assistant, registered radiologist assistant, or radiology practitioner assistant physically present in the room is in violation of Minnesota Statute 144.121, Minnesota Rules, Chapter 4732.0306, and 4732.0570 through 4732.0590.