



Arkansas Department of Health

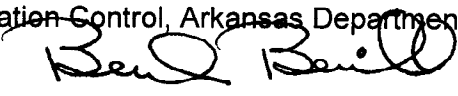
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Governor Asa Hutchinson

Nathaniel Smith, MD, MPH, Director and State Health Officer

ARKANSAS INFORMATION NOTICE 15-02

To: Veterinary Registrants

From: Bernard Bevill, Section Chief, Radiation Control, Arkansas Department of Health


Date: May 1, 2015

Subject: Use of X-ray Equipment in Veterinary Medicine

In part it is the mission of the Arkansas Department of Health's X-ray Program to ensure that equipment which produces ionizing radiation is operated in a manner which is safe for both the patient and the operator of the equipment.

During routine inspections which are conducted every five years for Veterinary Licensees, inspectors from the Department have noted a trend toward more "unsafe practice" during imaging.

Attached please find regulations specific to Veterinary Radiography from the Arkansas Board of Health's Rules and Regulations for the Control of Sources of Ionizing Radiation. These regulations further stipulate in part:

RH-1004. Radiation Protection Programs.

a. Each licensee or registrant shall develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities or x-ray equipment use and sufficient to ensure compliance with the provisions of this Section. (See RH-1500. for recordkeeping requirements relating to these programs.)

b. The licensee or registrant shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA).

c. The licensee or registrant shall periodically (at least annually) review the radiation protection program content and implementation.

Therefore, if not previously done, an internal policy should be implemented at your facility requiring basic radiation safety training for any employee who will be energizing the x-ray machine or holding an animal during imaging. Radiation Safety training modules are available online at little or no cost. It is in everyone's best interest to take every measure for the protection of the machine operator during radiographic imaging.

RH-1609. Veterinary Medicine.

a. Equipment.

1. The protective tube housing shall be equivalent to general x-ray tube.
2. Diaphragms or cones shall be provided for collimating the useful beam to the area of clinical interest and shall provide the same degree of protection as is required of the housing.
3. The total filtration permanently in the useful beam shall not be less than 0.5 millimeters aluminum equivalent for machines operating up to 50 kVp, 1.5 millimeters aluminum equivalent for machines operating between 50 and 70kVp, and 2.5 millimeters aluminum equivalent for machines operating above 70 kVp.

b. Operator protection.

All wall, ceiling, and floor areas shall be equivalent or provided with applicable protective barriers. Stationary, mobile or portable x-ray systems shall be provided with either a two (2) meter (6.5 feet) high protective barrier for operator protections during exposures, or shall be provided with means to allow the operator to be at least 2.7 meters (9 feet) from the tube housing assembly during exposures if the equipment has been installed or relocated after January 1, 2006.

For equipment installed before January 1, 2006, there must exist a means to allow the operator to be at least six (6) feet (1.8 meters) from the tube housing assembly during exposures.

c. Operating procedures.

1. No individual other than the operator shall be in the x-ray room while exposures are being made unless such individual's assistance is required, and
2. The operator shall stand behind the protective barrier of nine (9) feet from the useful beam and the animal during radiographic exposures, or
3. *When an animal must be held in position during radiography, mechanical supporting or restraining devices should be used. If the animal must be held by an individual, that individual shall be protected with appropriate shielding devices, such as protective gloves and apron, and shall be so positioned that no part of the holder's body will be struck by the useful beam. The exposure of any individual used for this purpose shall be monitored.*