

Department of Health

License Conditions for VETERINARY FILM X-Ray Equipment

- 1. The operator must keep a distance of at least two meters from the x-ray tube during radiography.
- 2. a) Radiography must be done with calibrated equipment using an acceptable technique.
 - b) The irradiation times and kilovoltage must be accurate.
 - c) Exposure duration shall be controlled by a preset timing mechanism that requires positive action by the operator to continue exposure.
- 3. Leakage radiation must be less than 100mR in one hour at one meter from the tube.
- 4. Manufacturers recommendations for film processing must be followed to ensure optimum film processing. If a darkroom is used it must be well designed.
- 5. Beam limiting device must collimate x-rays well.
- 6. The x-ray tube housing must be equipped with a beam-limiting device that enables adjustment of the size of the x-ray field.
- 7. The animal being x-rayed should be restrained by mechanical means where practicable. If an animal is required to be restrained by hand, any person providing such restraint must wear a protective apron and gloves.
- 8. Radiography should be performed in a manner that minimizes the dosage given to the animal, thus maximizing both the animal and operator safety.
- 9. The x-ray tube must be securely fixed and correctly aligned within the x-ray tube housing. The x-ray source assembly must maintain its required position without excessive drift or vibration during operation.
- 10. Image quality must be of an acceptable standard.
- 11.a) Operator and personnel doses should fall within the annual recommended dose limits below.
 - b) To minimize dosage the radiographic cassette must never be held by hand.

Body Organ or Tissue	Radiation Workers	Members of the Public
Whole Body	20 mSv	1 mSv
Lens of the eye	150 mSv	15 mSv
Skin	500 mSv	50 mSv
Hands	500 mSv	50 mSv

- 12. Radiation protection inspection will be done biennially to verify that:
 - a) The veterinary x-ray equipment functions properly.
 - a) Equipment is installed in a safe environment and is used in a way that provides maximum radiation safety for patients and operators.

A copy of these conditions shall be displayed at each licensed unit in a place readily visible to the public.

health:environmental:veterina