

WAC 246-225-140 Veterinary medicine radiographic installations.

(1) *Equipment.*

(a) The protective tube housing shall be of diagnostic type.
See WAC 246-225-040(4).

(b) Diaphragms, cones, or a stepless adjustable collimator shall be used 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. Cones or diaphragms, if used, shall be marked with their field size and the distance at which they are to be used.

(c) The half-value layer (HVL) of the useful beam shall not be less than as shown in the following table:

Measured Potential (kilovolts peak)	Half-value Layer (millimeters of aluminum equivalent)
70 and below	1.5
71	2.1
80	2.3
90	2.5
100	2.7
110	3.0
120	3.2

(d) A device shall be provided to terminate the exposure after a preset time or exposure. It must not be possible for the device to allow an exposure when preset at "zero" or "off."

(e) A dead-man type of exposure switch shall be provided, together with an electrical cord of sufficient length, so that the operator can stand out of the useful beam and at least two meters from the animal during all X-ray exposures.

(f) Reproducibility requirements as described under WAC 246-225-090.

(2) *Structural shielding.* All wall, ceiling, and floor areas shall be equivalent to or provided with applicable protective barriers as required in WAC 246-225-030(1).

(3) *Operating procedures.*

(a) In any application in which the operator is not located behind a protective barrier, clothing consisting of a protective apron having a lead-equivalent of not less than 0.25 millimeters shall be worn by the operator and any other individuals in the room during exposures.

(b) 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.

(c) When an animal or film 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 that individual shall be so positioned that no part of that individual's body will be struck by the useful beam. The requirements of WAC 246-221-090, Personnel monitoring, and WAC 246-225-020 (2)(h)(iv) apply to such individuals.

[Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-083 (Order 183), § 246-225-140, filed 7/23/91, effective 8/23/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-225-140, filed 12/27/90, effective 1/31/91. Statutory Authority:

RCW 70.98.080. WSR 83-19-050 (Order 2026), § 402-28-110, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-28-110, filed 12/8/80; Order 1084, § 402-28-110, filed 1/14/76; Order 1, § 402-28-110, filed 1/8/69; Rules (part), filed 10/26/66.]