



PUBLIC HEALTH DIVISION
Radiation Protection Services

John A. Kitzhaber, MD, Governor

Oregon
Health
Authority

800 NE Oregon Street, Suite 640
Portland, OR 97232
Voice 971-673-0490
FAX 971-673-0553
TTY 971-673-0372

INFORMATIONAL BULLETIN 2014-06

December 3, 2014

To: Oregon Medical and Veterinary X-ray Device Registrants

From: David M. Howe, Program Director 
Radiation Protection Services

Subject: Dosimetry Requirements for Medical and Veterinary Registrants

The State of Oregon Administrative Rule (OAR) requires radiation machine registrants to monitor the occupational exposure of their employees based upon the potential exposure risk to the individual and taking into consideration shielding, distance, workload, energy, direction of the primary beam and other related factors. The purpose of this requirement is to ensure radiation machine operators, other radiation workers and ancillary persons working in a radiation area do not receive exposure to radiation above the legal dose limits.

Dosimetry is required for all personnel who have the potential of receiving greater than 10% of the maximum occupational dose in a calendar year, individuals entering a high or very high radiation area, and individuals working with medical fluoroscopic equipment. The Authority's OARs are interpreted by RPS to direct the operator to utilize dosimetry for all procedures when lead aprons are used in lieu of a safe distance or a protected position. This would include the following situations:

- a. When patients (human or animals) are being held during the exposure;
- b. During mobile (portable) x-ray procedures; or
- c. When performing fluoroscopy or other special procedures.

Examples listed above require operators and other affected personnel to use appropriate dosimetry regardless if the operator can demonstrate they are receiving less than the 10% of the occupational dose because previous safe practices does not guarantee continued safe practice or the possibility of future errant exposure. **Keep in mind that monitoring badges shall be worn outside the apron at the collar level.**

OAR relating to dosimetry and dose limits are posted on our website at: www.healthoregon.org/xray.

- a. OAR 333-120-0100: Occupational dose limits for adults;
- b. OAR 333-120-0210: Conditions Requiring Individual Monitoring of External and Internal Occupational Dose; and
- c. OAR 333-120-0215: How to wear dosimetry.

If you have questions or need guidance, please contact Rick Wendt, Operations Manager at 971-673-0505 or email at: Richard.a.wendt@state.or.us