February 18, 2016

To: Dental Facilities X-ray Machine Registrants and Interested Parties

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

Subject: Use of Lead Aprons on Patients during Dental X-Ray Procedures

The Center for Health Protection, Radiation Protection Services (RPS) is releasing this informational bulletin to notify dental facilities they are no longer required to provide the patient with a leaded apron while taking patient dental X-rays.

Oregon regulations have been repealed relating to the requirement of providing shielding to the adult patient during dental x-ray procedures. Over the last 50 years, X-ray equipment and procedures have been optimized with improved technology thereby significantly reducing radiation exposure to the patient. Lead aprons can be used as a precautionary measure if a facility chooses to use them.

RPS does recommend providing lead aprons to pregnant patients, individuals who choose to remain in the exam area during the exposure, and to any patient who requests the use of an apron. The International Atomic Energy Association (IAEA) does recommend providing a lead apron in vertex occlusal examinations which may provide some additional protection to the patient.

Thyroid collars should be provided to pediatric dental patients during x-ray examinations, especially if the thyroid could be in the direct beam. The thyroid gland, especially in children, is among the most sensitive organ to radiation which can induce both benign and malignant tumors. RPS is currently considering amending its regulations to require dental facilities to provide the pediatric patient with thyroid shielding when it will not interfere with the examination.

RPS based the above recommendations on dental lead apron use from guidance provided by the IAEA and the National Council on Radiation Protection and Measurements. If you would like further clarification, please feel free to contact Todd S. Carpenter, Radiation Protection Services, (971) 673-0500; email: Todd.s.carpenter@state.or.us.