


## Informational Bulletin 2025-02

April 18, 2025

To: Facilities That Perform Dental Intraoral X-rays on Pediatric Patients

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

**Subject: OAR 333-106-0325 Exemption-Proposed Revision on Thyroid Shield Use Requirement for Dental Intra-Oral Radiographic Images on Pediatric Patients**

The Public Health Division, Radiation Protection Services (RPS) is releasing this informational bulletin regarding a proposal to amend the thyroid shield (collar) use requirement for dental intra-oral X-rays on *pediatric patients* (up to 18 years old).

### **Background: Thyroid Collar Use for Pediatric Dental Intraoral X-rays:**

Current Oregon Administrative Rule (OAR) 333-106-0325(7)(d) states that, "All pediatric patients shall wear a 0.25 lead equivalent thyroid collar to protect the thyroid during intraoral X-ray exposures."

This OAR has been based upon a long-standing National Council on Radiation Protection (NCRP) recommendation to use thyroid collars for all intraoral imaging and extraoral imaging (panoramic and cephalometric) when it does not interfere with the required diagnostic information on the image.

That said, a Journal of American Dental Association (JADA) article, (dated February 1, 2024), opines that there is not a need to use thyroid shielding stating that, "Abdominal and thyroid shielding during diagnostic intraoral, panoramic, cephalometric, and CBCT imaging is no longer recommended, and the use of these forms of protective shielding should be discontinued as routine practice."

To further reduce radiation dose, the NCRP recommends 1) using rectangular collimation for all intraoral imaging except where patient anatomy or behavior does not allow its use and 2) to use the fastest imaging receptor (plates and sensors) for all intraoral and extraoral imaging.

## **Proposed OAR Amendment for Thyroid Collar Use During Dental Intraoral X-rays:**

In recognition of the above and best practice, effective immediately, RPS is removing (exempting) the pediatric dental X-ray patient thyroid collar requirement with proposed permanent rulemaking, provided that two conditions are met, including:

- 1) the X-ray machine collimator must be rectangular and be used with a position indicating device (PID) for each X-ray exposure.

AND

- 2) the use of rectangular collimation must be paired with a digital receptor.

**\*\*** If a rectangular collimator and/or digital receptor is not used, then a pediatric thyroid collar is still required [per OAR 333-106-0325(7)(d)].

For any questions, please contact:

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- 2016-02 [Use of Lead Aprons During Dental X-ray Procedures](#)
- 2024-01 [Rectangular Collimation Use in Intraoral X-rays](#)