January 03, 2020

To: X-ray Diagnostic Imaging Registrants

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

Subject: Repeal of Oregon Administrative Rules (OAR) Requiring Gonadal Shielding

The Center for Health Protection, Radiation Protection Services (RPS) is releasing this informational bulletin to advise Registrants who provide diagnostic imaging services that they are no longer required by OAR to provide gonadal shielding to a patient receiving X-ray exposures.

Current administrative rules do not appear to be in alignment with scientific evidence as outlined in the American Association of Physicist in Medicine (AAPM) policy statement dated April 2, 2019. The position statement summarizes that gonadal shielding can negatively affect automatic exposure control and image quality in modern X-ray devices. This in turn can increase X-ray output, a patient’s radiation dose, and degrading of the image quality.

The AAPM policy statement also includes that patient shielding is ineffective in reducing internal scatter. The main source of radiation dose to internal organs outside of the imaging field of view is X-ray scatter inside the body. Surface shielding covering these organs has no impact on this scatter.

On November 12, 2019, the Image Gently Alliance endorsed AAPM’s policy of discontinuing gonadal shielding. The mission of the Alliance is to improve safe and effective imaging care of children.

RPS understands that radiation exposure to the pediatric population may generate anxiety among the general public and medical communities. The proposed rule will not prohibit registrants from continuing the practice of providing a patient with gonadal shielding, if they so desire. RPS recommends that registrants providing diagnostic X-ray imaging services establish policies for patients who are not comfortable without the shielding during the X-ray exposure. As stated within the AAPM’s policy statement, “blanket statements requiring the use of such shielding are not supported by current evidence”.

If you need further clarification, please feel free to contact Rick Wendt, Radiation Protection Services, 971-673-0505 or email; Richard.a.wendt@dhsoha.state.or.us.