



JRCERT Position Statement on Gonadal Shielding in the Clinical Setting

The Joint Review Committee on Education in Radiologic Technology (JRCERT) **Standards for an Accredited Educational Program in Radiography** are designed to promote academic excellence, patient safety, and quality healthcare.

Standard Five - Objective 5.3 of the **Standards** requires programs to assure students employ proper safety practices. Programs achieve this by instructing students in the utilization of imaging equipment, accessories, optimal exposure factors, and proper patient positioning to minimize radiation exposure to patients, selves, and others. These practices assure radiation exposures are kept as low as reasonably achievable (ALARA).

Gonadal shielding has been a longstanding practice during radiography examinations in instances where the clinical objectives of the examination are not compromised¹. Recent research² in the effectiveness of gonadal shielding during abdominal and pelvic radiography has found, in most instances, that:

- gonadal shielding does not contribute significantly to reducing patient risk from radiation exposure;
- gonadal shielding positioned improperly may have the unintentional consequence of increasing patient exposure;
- gonadal shielding positioned improperly may result in the loss of valuable diagnostic examination results.

Based on the recent research pertaining to the use of gonadal shielding during abdominal and pelvic radiography and the longstanding practice in radiography to only shield in instances in which diagnostic quality will not be compromised, the JRCERT has concluded that routine use of gonadal shielding for abdominopelvic radiography exams should not be standard practice for clinical radiography students when the use of such could interfere with the diagnostic quality of the exam and may result in the risk of a repeat exposure.

Educational programs should review and consider amending, if necessary, policies to assure that the use of gonadal shielding should only be utilized when it will not interfere with the purpose of the examination and when it aligns with clinical facility policy.

Consistent with **Standard Five**, programs must have policies/processes in place to assure students are educated on the importance of the proper use of shielding and optimal use of radiation to promote the health and safety of students, patients, and the public.

¹[NCRP] National Council on Radiation Protection and Measurements. 2021. NCRP Recommendations for Ending Routine Gonadal Shielding During Abdominal and Pelvic Radiography. Bethesda (MD): National Council on Radiation Protection and Measurements. Statement No. 13.

²[FDA] U.S. Food and Drug Administration. 2020. Food and Drugs; radiation protection recommendations; radiological health; recommendations for the use of specific area gonadal shielding on patients during medical diagnostic x-ray procedures. Washington (DC): US Government Publishing Office. 21 CFR Part 1000.50.