

# Radiation Protection Policy

## Radiologic Technology Program



## Principles of Radiation Protection

The responsibility of a radiologic technologist and a student radiographer is to maximize the benefit from each x-ray exposure and to minimize the radiation dose received by the patient.

1. Techniques
  - a. Takes time to position the patient properly.
  - b. Sets techniques correctly utilizing manual, anatomic programming and digital equipment.
  - c. Use the highest kVp and the lowest mAs that is consistent with acceptable image quality.
2. Collimation
  - a. Limits the size of the beam to include only the area of interest.
  - b. There is never justification of a beam larger than the IR.
  - c. Collimation improves image quality.
  - d. Collimation is one of the most vital things the technologist can do to protect the patient.
3. Gonadal Shielding
  - a. Use gonadal shielding whenever this will not interfere with the diagnosis.
  - b. Gonadal shielding should be used on every patient, along with shielding eyes, breasts, and thyroid, as appropriate.
4. Radiographic Image Processing
  - a. Process radiographic images based on departmental criteria.
5. Protecting Yourself
  - a. You can be protected by the same techniques used to protect the patient.
  - b. Always wear lead aprons when applicable.
  - c. Always wear dosimeter to monitor exposure. Wear this at collar level, outside of the lead apron.
  - d. *NEVER HOLD A PATIENT OR AN IR (IMAGE RECEPTOR) DURING ANY RADIOGRAPHIC PROCEDURE.*
  - e. Remember the Cardinal Rules: TIME, DISTANCE, SHIELDING.