
Patient's Name

MR#

Date of exam



Step Lightly Checklist

Review steps below before starting the procedure.

Safety is a team effort: don't be afraid to ask the necessary questions to ensure you are working as a team to keep radiation dose to patients and staff as low as possible

Reducing radiation dose must be balanced with safe, accurate and effective completion of the procedure. Not all the steps below may be possible in each case, depending on patient size, technical challenge and critical nature of the procedure. Overall patient safety is most important. The goal is to minimize the dose to the patient while providing important and necessary medical care.

- Ask patient or family about previous radiation (a medical imaging **record card** is available at www.imagegently.org)

Answer questions about radiation safety (a **brochure for parents** is available at www.imagegently.org)
- Use ultrasound when possible
- Position hanging table shields and overhead lead shields prior to procedure with reminders during the case as needed
- Operators and personnel wear well fitted lead aprons, thyroid shield and leaded eye wear
- Use pulse rather than continuous fluoroscopy when possible, and with as low a pulse as possible
- Position and collimate with fluoroscopy off, tapping on the pedal to check position
- Collimate tightly. Exclude eyes, thyroid, breast, gonads when possible
- Operator and personnel hands out of beam
- Step lightly: tap on pedal and review anatomy on last image hold rather than with live fluoroscopy when possible; minimize live fluoroscopy time
- Minimize use of electronic magnification; use digital zoom whenever possible
- Acknowledge fluoroscopy timing alerts during procedure
- Use last image hold whenever possible instead of exposures
- Adjust acquisition parameters to achieve lowest dose necessary to accomplish procedure: use lowest dose protocol possible for patient size, lower frame rate, minimize magnification, reduce length of run
- Plan and communicate number and timing of acquisitions, contrast parameters, patient positioning and suspension of respiration with radiology and sedation team in advance to minimize improper or unneeded runs
- Move table away from X-ray tube in both planes. Move patient as close to detector in both planes
- Use power injector or extension tubing if hand injecting
- Move personnel away from table or behind protective shields during acquisitions
- Minimize overlap of fields on subsequent acquisitions
- Patient shielding is not routinely recommended as collimation is the best method of reducing extraneous dose and there is some thought that shielding may actually increase internal backscatter. However, the evidence is not clear and therefore if the family requests shielding, it may be used
- After procedure: record and review dose