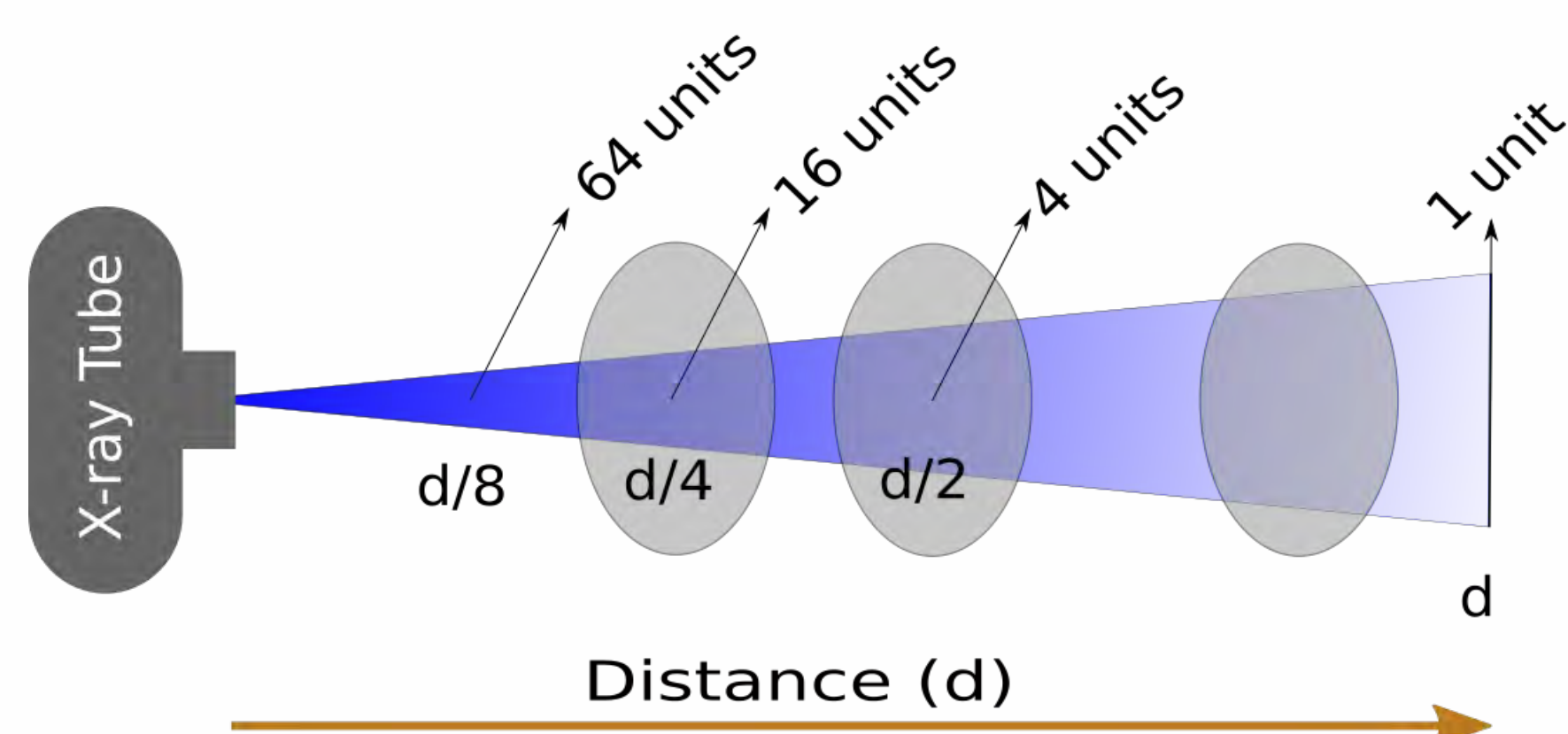


Radiation Safety in Fluoroscopy

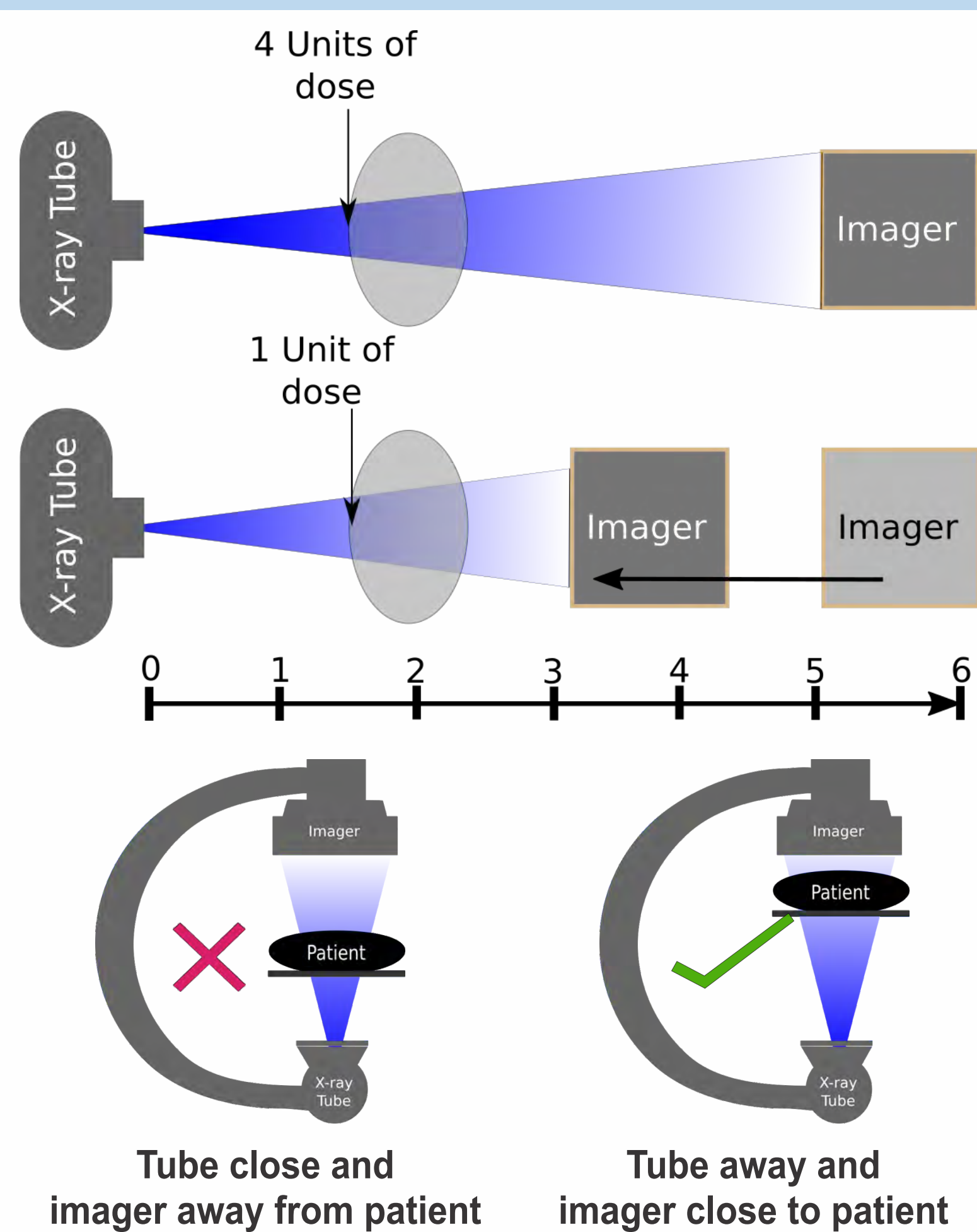
Ways To Reduce Radiation Dose To Patient And Staff

“Reducing patient dose also results in staff dose reduction”

Maximise distance between the X-ray tube and the patient to the extent possible.



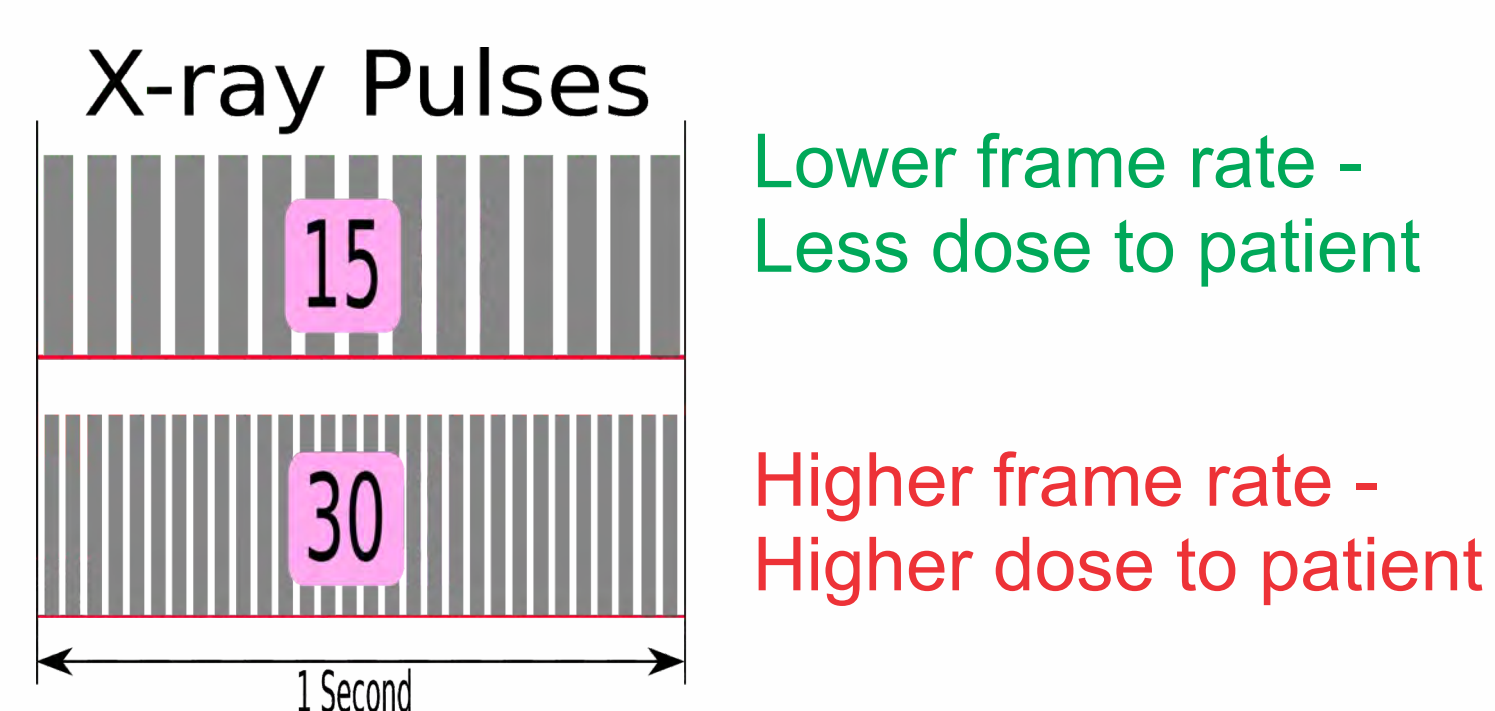
Maximise distance between patient and the Imager



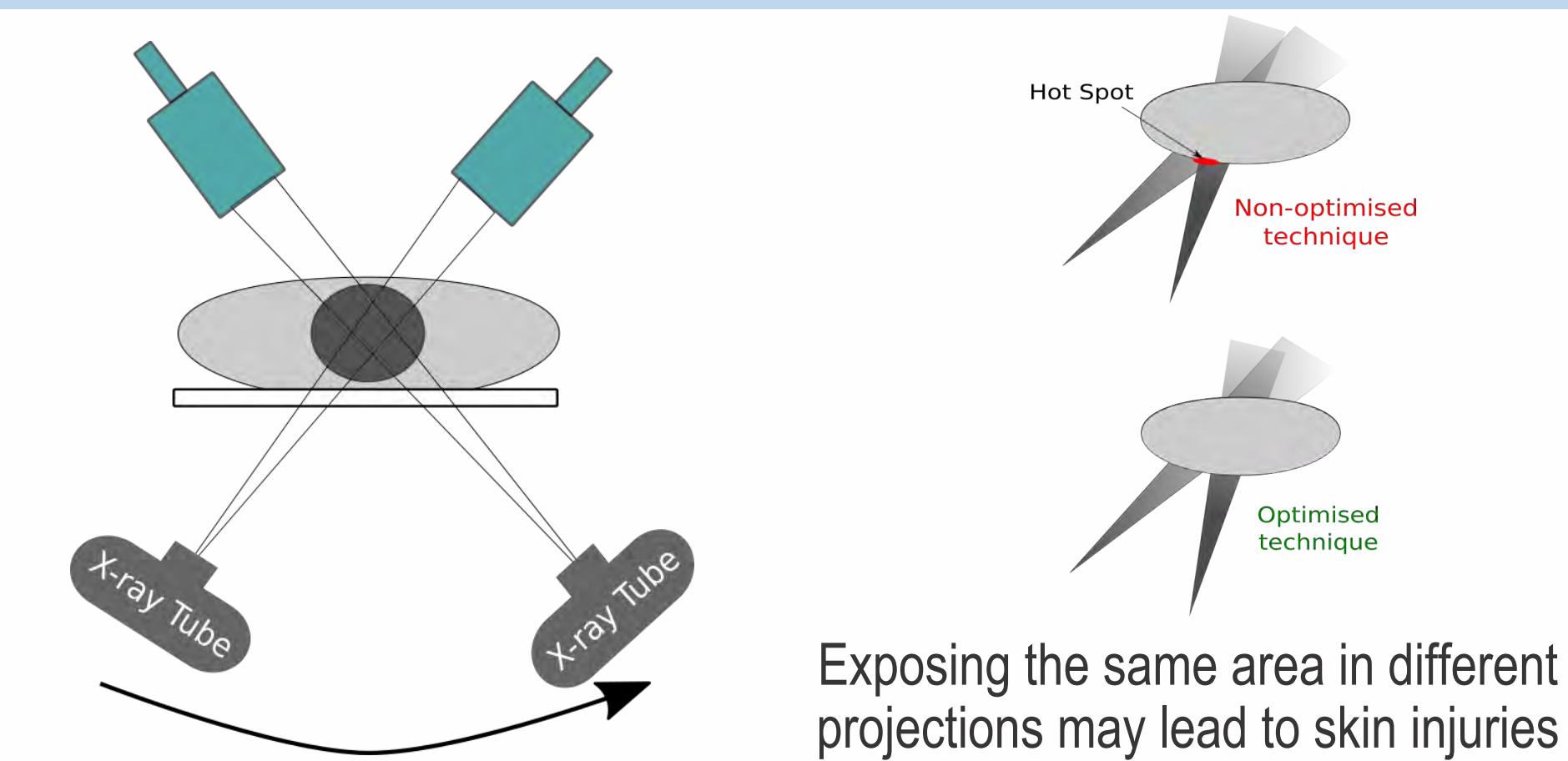
Minimise fluoroscopy time and monitor DAP values. Step on the pedal only while looking at the screen. Employ last image hold to review findings.



Minimise number of frames/sec and cine runs to clinically acceptable level.

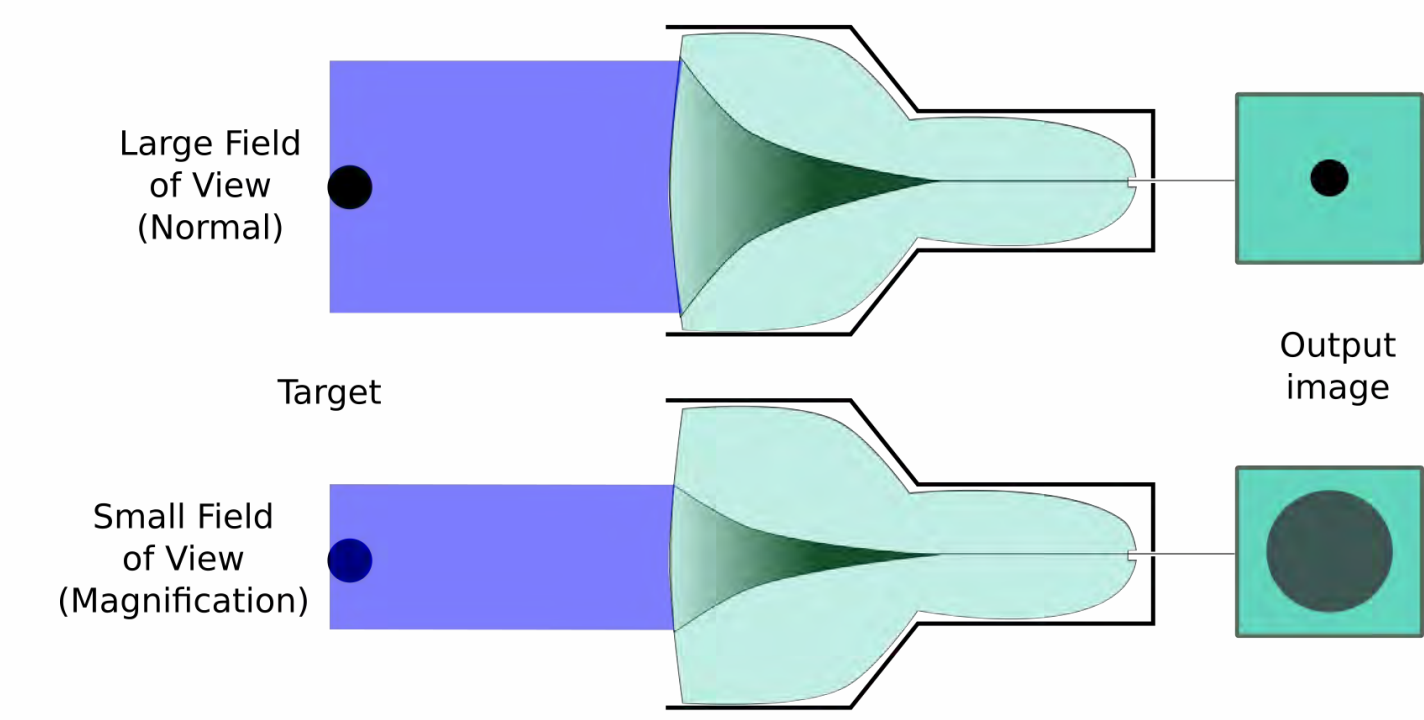


Spread the dose by rotating X-ray tube around the patient to avoid high Entrance Skin Dose (ESD).



Magnification mode results in higher patient dose

More beam condensed to image intensifier output results in brighter image



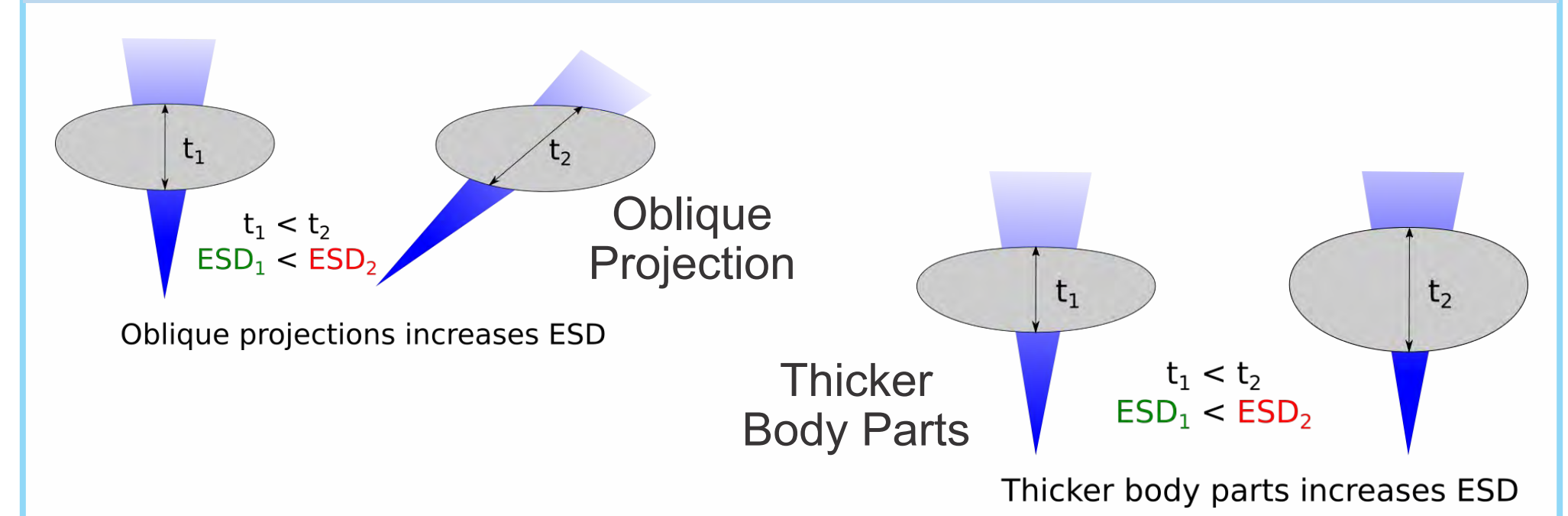
Less beam condensed to image intensifier output results in dimmer image. This increases dose rate and result in higher patient dose.

Collimate the X-ray beam to the area of interest. Collimation reduces the scattered dose and improve image contrast.

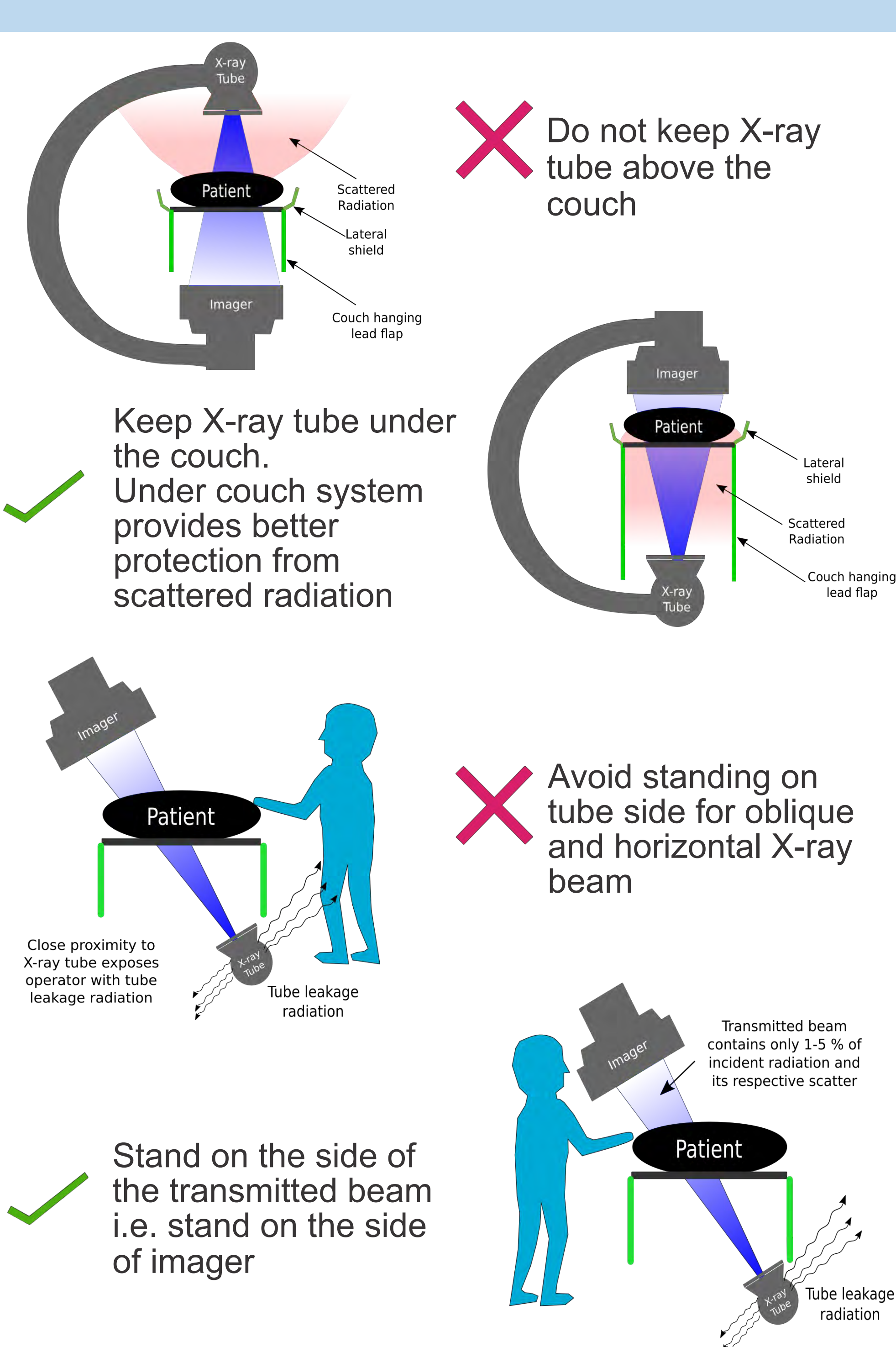


Bad Collimation Good Collimation

Be aware that oblique projections and Thicker body parts increases ESD



Staff dose increases with inappropriate positioning

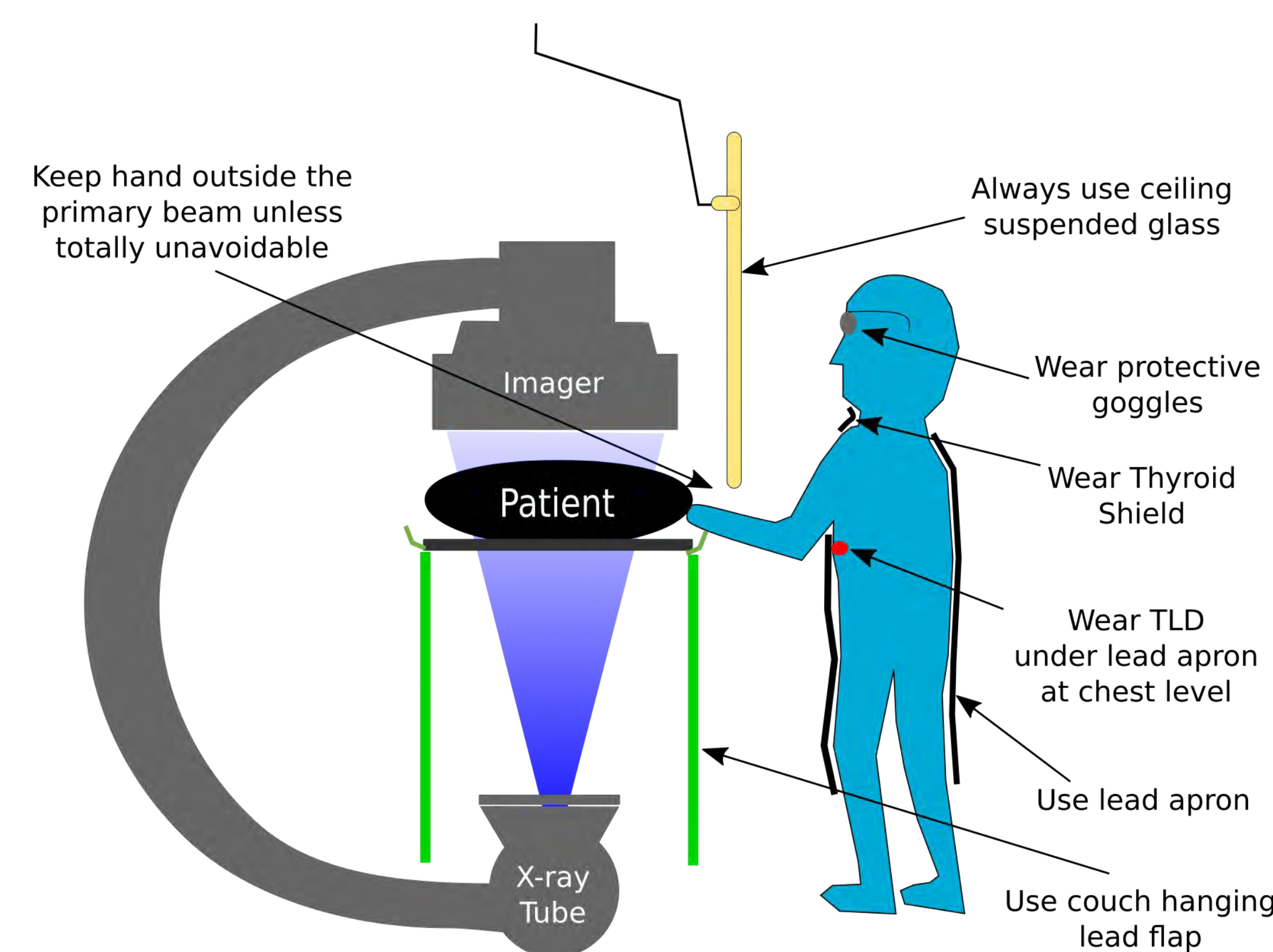


Radiation Protection of Staff

Always wear protective accessories such as lead apron, thyroid shield and protective goggles.

Always wear TLD badge (at chest level and below lead apron).

Make use of ceiling suspended glass, couch hanging lead flaps and lateral shields.



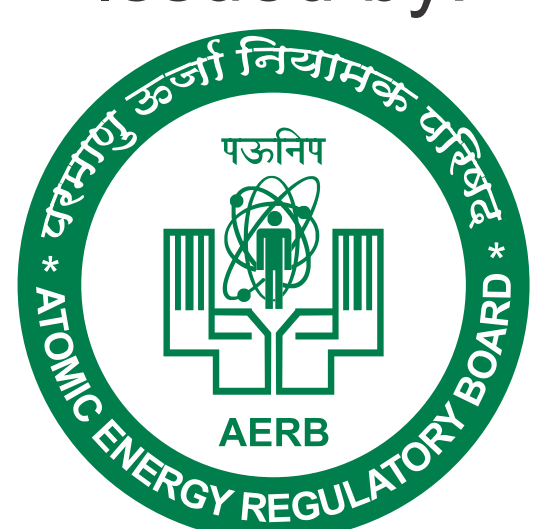
Ancillary staff should make use of mobile protective barrier.

Ensure that your equipment is Licensed by AERB for its operation and periodic Quality Assurance (QA) is carried out.

Make appropriate use of Time, Distance and Shielding.

- Minimise the time of exposure and cine runs.
- Maximise the distance between patient and operating personnel.
- Use protective accessories for shielding.

Issued by:



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This poster must be displayed at prominent location for due adherence by all radiations workers.