

From London, Ontario, a peer reviewed research article by Liz Lorusso, published in 2015 for Elsevier's Journal of Medical Radiation Sciences

- “Examining Practitioners’ Assessments of Perceived Aesthetic and Diagnostic Quality of High kVp-Low mAs Pelvis, Chest, Skull, and Hand Phantom”
- Study included 91 practitioners:
- 6 radiologists, 4 radiologist residents, 48 radiographers, 31 radiography students and 2 PACS admin.

Preprogrammed technical factors used at the clinical sites were already 10 kV higher than with film screen.

- Images taken 20 and 30 kV higher (with mAs compensation) than with film screen.
- **Conclusion:** You can go up 20 kVp higher with a compensated lower mAs, and acquire images of *diagnostic quality*.

Dose Savings with +20 kV and compensated mAs

- Skull = 54% ESE savings.
- Pelvis = 56% ESE savings.
- Hand = 60% ESE savings.
- Chest = 72% ESE savings.