

## Amendment to HARPA Regulation 543 – July 2022 : Information Sheet

Timeline	Number of options for evaluating X-ray plans	Applicable shielding standard(s)
Prior to July 1, 2022	One option	(1) Appendix 2 of Safety Code 20A
Effective July 1, 2022	Two options	(1) Appendix 2 of Safety Code 20A <b>OR</b> (2) NCRP Report #147

### Background

- Currently, all X-ray installation plans must comply with the shielding methodology standards contained in Appendix 2 of Health Canada Safety Code 20A, prior to their approval from the Director of X-ray Safety (Director) at the Ministry of Health.
- This requirement applies to all X-ray facilities where X-ray machines (including CT scanners) are used on humans.

### Effective Date

- The targeted effective date for the change is **July 1, 2022**.

### Regulation Change to HARP Regulation 543

- Subsection 3(2) of Regulation 543 is changing to add an additional shielding methodology, National Council on Radiation Protection and Measurements (NCRP) Report #147, for the purpose of evaluating the required radiation shielding barriers for X-ray and CT installation plans, submitted by X-ray facilities that are regulated under the *Healing Arts Radiation Protection* (HARP) Act.
- Facilities will have the option of using the existing shielding methodology contained in Appendix 2 of Safety Code 20A **or** the newly added shielding methodology contained in NCRP Report #147 when completing their plan application, including the relevant shielding calculations.

### Impact

- The choice of shielding methodology is dependent on the needs and complexity of the facility. Facilities who need to continue using the original (existing) shielding methodology in Appendix 2 of Safety Code 20A may continue to do so without the requirement to adopt NCRP Report #147 and these facilities will not be impacted by this change.
- The regulation change will apply to X-ray and CT installation plans submitted for all X-ray facility types regulated under the HARP Act, including but not limited to, hospitals, independent health facilities, dental facilities, and chiropractic offices.

### Impact

- Appendix 2 of Safety Code 20A will continue to be accepted for X-ray and CT plan applications.

Facility Type	Applicable shielding standards effective July 1, 2022
Dental facilities	Appendix 2 of Safety Code 20A <b>OR</b> NCRP Report #147
Independent Health Facilities, chiropractic offices, etc.	
Hospitals	

### Items not changing

- There are no other substantive changes to the HARP Act and Regulation 543 as part of this regulation change.
- Shielding barrier limits (dose limits) prescribed under subsection 3(1) of Regulation 543 are not subject to change via this regulation change.

Timeline	Shielding barrier limits (dose limits) (s. 3(1) of Reg 543)
Prior to July 1, 2022	Existing dose limits
Effective July 1, 2022	No changes

### Submission of plan applications

- Due to the technical nature of the plan application process, it is strongly recommended that the plan submitter (either in-house or third-party agent) have the appropriate technical expertise and experience in submitting X-ray and CT plan applications especially in interpreting and applying the shielding methodologies: Appendix 2 of Safety Code 20A and NCRP Report #147.
- Based on past submissions, plans received from appropriately qualified third-party agents on behalf of facilities had fewer errors and received expedited approval of plans.

### Relevant Links

- Safety Code 20A is a free publication which be accessed from Health Canada website ([Publications – Health risks and safety - Canada.ca](https://www2.gov.gc.ca/publications/2014/01/01/20140101-sc20a-eng.pdf)).
- NCRP Report #147 is a paid publication from National Council on Radiation Protection and Measurements (NCRP) which can be purchased on the NCRP website ([ncrponline.org](http://ncrponline.org))

### Questions?

If you have any questions or comments refer to the corresponding Frequently Asked Questions document. Afterwards, if you still need assistance, contact X RIS at the Ministry of Health at [xris@ontario.ca](mailto:xris@ontario.ca).