

### Why are you no longer providing lead shields to patients?

Patient shielding in diagnostic imaging procedures has been standard practice since the 1950s. With advancements in technology, our machines now use significantly less radiation to create an optimal image<sup>1</sup>. Using a patient shield can interfere with this technology and lead to an increase in the radiation dose<sup>1</sup>. Decades of research into the effects of radiation on the body have also revealed that the parts of the body that we were protecting are much less sensitive to radiation than we thought, and there is no evidence of that damage from radiation is passed down to future generations<sup>2</sup>. This change in practice is endorsed by many professional organizations in Canada<sup>4</sup>.

### Do you need to shield children and pregnant patients?

Shielding is not recommended for children or pregnant patients. The amount of radiation used in most imaging exams is so small, that the risk to children or unborn babies is almost zero<sup>3</sup>. Using a shield when not necessary may actually increase radiation exposure as it may interfere with the image and require that the images be repeated, or interfere with the technology and may cause a higher dose<sup>3</sup>.

### Will you still shield me if I request it?

Shielding is not recommended. If you are requesting a shield after the benefits and risks have been explained to you, and it will not compromise the images, then a shield can be provided.

### Why was I asked to wear lead when holding my child for their X-ray? Why is the technologist wearing lead?

Your child needs an x-ray, therefore it is necessary for them to be exposed to radiation in order to get a diagnosis. The Saskatchewan Health Authority follows the As Low As Reasonably Achievable (ALARA) principle. ALARA is a radiation safety principle that means to avoid radiation exposure that does not have a direct benefit to you. There is no reason that you or staff should be unnecessarily exposed to radiation, therefore lead shielding will always be recommended and provided to you when there is a potential for radiation exposure.

**If you have any questions or concerns, please speak to the medical radiation technologist who will be performing your exam.**

#### References:

1. National Council on Radiation Protection and Measurements (NCRP). NCRP Recommendations for Ending Routine Gonadal Shielding During Abdominal and Pelvic Radiography. Bethesda, MD: National Council on Radiation Protection and Measurements; 2021
2. Patient Gonadal and Fetal Shielding in Diagnostic Imaging Frequently Asked Questions [Internet]. Available from: [https://www.aapm.org/org/policies/documents/CARES\\_FAQs\\_Patient\\_Shielding.pdf](https://www.aapm.org/org/policies/documents/CARES_FAQs_Patient_Shielding.pdf)
3. AAPM CARES [Internet]. AAPM CARES Module 3 - Fetal Shielding w3.aapm.org. Available from: <https://w3.aapm.org/cares/videoModules.php>
4. CAMRT Position Statement [Internet]. 2021. Available from: <https://www.camrt.ca/wp-content/>



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