

Frequently Asked Questions – Parents & Guardians

Patient Shielding for Diagnostic Imaging

Why is the technologist not putting a lead shield on my child for this exam? They used one last time so why the change in practice?

Improved technology means that radiation doses have been reduced by 95% since shielding was first introduced. We can now obtain high-quality x-rays with very small amounts of radiation. Science has shown that lead shields are not effective in further reducing dose. Canadian professional associations representing technologists, radiologists and medical physicists all support this change. The international Image Gently campaign, which provides guidance on best practices in pediatric imaging, also supports this change.

Won't multiple X-rays over my child's lifetime put them at greater risk of developing cancer?

Healthy cells repair themselves after exposure to small doses of radiation, and cells do not become more sensitive to radiation after multiple exposures. For example, radiation therapy takes advantage of this by splitting treatments up into multiple smaller sessions, allowing healthy cells time to recover between treatments. Shielding use does not affect how cells repair themselves.

Won't radiation affect my child's sperm or ovaries?

One of the reasons that shielding was initially adopted in the 1950's was concern that radiation might damage sperm or eggs. Since that time, there has been no significant scientific evidence of these kinds of effects in humans, even for those exposed to much higher doses of radiation than are used in medical imaging.

What if I still want my child to be shielded?

The use of shielding during your child's diagnostic exams is no longer recommended. For certain exams, the body part we need to see may be covered if a shield is used. However, if you insist on shielding being used, it will be provided as long as it does not interfere with the exam.

Why am I required to wear an apron while I'm in the room, but my child does not have any shielding?

Radiation is required to produce an image that the doctor can use for diagnosis. Your child's doctor has decided that the benefits obtained from this image outweigh any small risk from the radiation. Parents, staff or others present in the room do not receive any medical benefit from being exposed to radiation and thus wear an apron.