

# END OF SHIELDING FOR ALL AGES

## Discontinuation of patient shielding from X-ray exams



In order to provide the highest quality diagnostic exams at the lowest health risk, we will **no longer** place lead shields over you or child during an X-ray exam.

This change in practice is based on many years of research which have shown that levels of radiation used in modern X-ray exams are so low that the risk of harm is very small or zero. These studies conclude that shields have no added benefit for patient safety.

Studies have also shown that shielding patients carries the risk of using more radiation than not shielding and could cover a body part that the doctor needs to see.

For patient safety, experts on X-ray radiation agree that patient shields should not be used.

### **Q: Why do I have to wear a lead apron, but my child does not?**

A: Our goal is to image your child. We need X-rays to make the image, so, it's important that we don't block any X-rays by placing a lead apron on your child. However, when we take the X-ray, a small amount of the radiation may bounce off your child and expose you. We want to protect you from these stray X-rays by having you wear a lead apron because they have no benefit to you. We also want to protect our staff from regular exposure that could be harmful as they do this every day.

### **Q: Can you still shield me or my child?**

A: Yes, we will shield you or your child if it is possible to do so without compromising the quality of the exam. We understand that a shield can be comforting and ease fear or anxiety about the X-ray exam. However, we want you to know that shielding itself carries the risk of using more radiation than not using shielding, and there are some exams that can never be done using a lead shield because it could cover a body part that the doctor needs to see.

### **Q: My child or I receive routine X-ray exams. Are we at greater risk of harm from radiation?**

A: There is no evidence to suggest that risk from multiple exams over a patient's lifetime adds up. To ensure safety and quality, our radiation safety team performs risk reviews on patients who receive multiple X-ray exams in a short period of time to see if added radiation may be harmful. Our team is happy to answer any questions or concerns you may have about the amount of radiation you or your child are receiving.

### **Q: Why was patient shielding used in the first place if it has no benefit to the patient?**

A: Patient gonadal shielding was first recommended in 1976 by the FDA. At that time, these shields were thought to protect patients from hereditary risks. Now after more than 50 years of research, we know that is not true. In addition, modern X-ray machines use ~96% less radiation than the machines when the recommendations to shield patients were made.



**WENTWORTH-DOUGLASS  
HOSPITAL**

A Mass General Community Hospital

Source: Ann & Robert H. Lurie Children's Hospital - [LurieChildrens.org/PatientShielding](https://www.luriechildrens.org/PatientShielding)

Supported by: American Association of Physicists in Medicine (AAPM) - [AAPM.org](https://www.aapm.org)  
American Board of Radiology (ABR) - [TheABR.org](https://www.theabr.org)  
American College of Radiology (ACR) - [ACR.org](https://www.acr.org)  
American Society of Radiologic Technologists (ASRT) - [ASRT.org](https://www.asrt.org)  
Image Gently - [ImageGently.org](https://www.imagegently.org) | Society for Pediatric Radiology - [PEDRAD.org](https://www.pedrad.org)