FAQs For Parents

**What harm do x-rays do to my baby?**

X-rays are a very important tool used to show what is going on inside your baby. X-ray machines pass radiation through the body to form an image on a piece of film. Unfortunately, the radiation causes damage to the cells of the body. Most cells are not prone to severe damage and/or heal quickly from the effects of radiation. However, ovaries and testicles, collectively known as gonads, are particularly sensitive to damage by x-rays. Very high dosages and/or numerous exposures have been linked to increased rates of birth defects and sterility. This type of damage is unlikely for your baby and it is only in extreme circumstances that lasting damage may occur.

**They want to take an xray without a shield should I allow this?**

Definitely yes! There are times when x-rays will have to be taken without a shield. By their very nature, shields block x-rays from passing through, this prevents the imaging of what is under the shield. In cases where the purpose of the x-ray is to diagnose a part of the body near the gonads, such as the pelvis or gastrointestinal tract, the shield would render the x-ray useless. In all cases the benefits of diagnostic xrays far outweigh the slight risk caused by a few unprotected exposures.

**An x-ray was taken of my baby without a shield, will he/she be sterile?**

No. The low dosages of modern x-ray equipment pose little risk to your baby it is only with numerous x-rays that damage can become severe enough to cause health problems.

**The hospital does not use shields, can I buy them myself?**

Yes, however shields are only to be used by qualified medical personnel.
FAQs For Caregivers

Is the use of gonad shields required by law?

We must first qualify our answer to this question by stating that our opinion is based upon a simple survey of applicable laws, rules and regulations that we were able to find through internet searches. We are in no way qualified nor intend to offer any legal advice. We strongly urge you to consult with an attorney or other authority regarding specific legal requirements of your state.

What our search yielded was that federal† “rules” “recommend” the use of gonad shields during xrays. While this definition seems ambiguous many states remove this ambiguity by specifically requiring gonad shields during xrays unless they would interfere with the image. Budgetary nor procedural difficulties were not cited as valid reasons for failure to use shields. We found no direct reference to any specific penalties for failing to apply shields, however there may be general penalties for failing to follow established guidelines.

JCAHO‡ has patient radiation safety standards in place, however, enforcement in nurseries has not been strict because there was not a suitable shield. They have told us that this will be looked at more closely in the future.

Our conclusion is that the law expects you to use gonad shields. Authorities may not levy fines, revoke or suspend licenses, etc. for failing to use shields, however there may be general penalties for failing to follow established guidelines.

Can we use shields for more than one patient?

In the critical care environment, for which STGs are designed, few, if any, of the various devices which come in direct contact with patients are shared. This concept is a long accepted standard for infection control reasons.

Cleansing with alcohol will kill most of the germs on the surface of the shield, however STGs should never be considered as being sterile. Sharing could therefore provide a method of transmission of disease from patient to patient. As the maker of STGs we firmly recommend against the sharing of shields.

We are considering using your shields but our budget won’t allow it.

Budgets are not an excuse for failing to protect your patients, choosing not to shield is not an option. When amortized over the length of a hospital stay or even compared against the charge for a single xray, the cost of an STG is very small. We naturally feel our product is the best on the market and would like you to use it, however, if you are unable to purchase our shield, buy something else or improvise, but some how, some way, SAVE THOSE GONADS!

We are only going to take one xray, what harm could it do?

One or two xrays by themselves are not going to cause any serious long lasting effects. However, the effects of xrays are cumulative. The first xray you take is just that, the first. Through the course of their life as a child and as an adult they will be subjected to many more for various reasons, from dentistry to broken bones. Premature babies are much more likely to be subjected to additional xrays because of the numerous health issues associated with being born too soon.

Once an unshielded xray has been taken the damage has been done, you can’t take it back. This is why the requirements for shields are in place, because no one knows what the future holds.

Has there been any research done on the long term effects of xrays on the neonate?

We have been unable to find any, but we have spoken to several researchers who expressed interest in taking up the task. If you are aware of any research which has been done or any in progress we would be interested in hearing about it.

Part of the problem with research is the time period it must cover is 20-40 years. Another big problem is that shield use is far from universal and past records of xrays do not generally indicate whether or not shields were used. For this reason we urge that the use of shields be documented on charts.

Is there a function to the heart shape or is it just to be cute?

Yes, the lobes of the heart are strategically placed to cover the ovaries located in the hip area of a girl, the shield is flipped over with the lobes down to protect the testicles of a boy. This shape is efficient in that it provides protection to the vital areas without excessive pressure on the baby. And yes, we must admit, they are kind of cute!

† No endorsement by Joint Commission on Accreditation of Health Care Organizations is implied.
‡ US FDA Code of Federal Regulations Title 21, Chapter I, Sec. 1000.50