Changes in shielding for X-ray imaging

St. Jude Diagnostic Imaging staff will no longer regularly use lead shields to cover patients’ sex organs for X-rays. In the past, lead shields were used to protect the gonads (sex organs: testes and ovaries) or a fetus (baby) if the patient might be pregnant.

Research studies show this shielding does not help and might cause other problems.

Why use radiation for imaging?

Many medical images use small amounts of radiation to take pictures inside the body. These images are a useful tool for diagnosing health problems. Radiation also can harm healthy tissues and organs. During X-rays, the body absorbs some radiation. When the St. Jude medical staff orders an X-ray, the benefits of the test are greater than the small risk of using radiation for the test.

Who recommends not shielding?

The American Association of Physicists in Medicine and the American College of Radiology both recommend not using patient gonadal and fetal shielding during X-ray imaging.

Both groups strive to make these tests as safe as possible for patients.

Shielding provides little to no health benefit.

Research shows radiation doses used in diagnostic imaging cause little to no harm to sex organs and fetuses.

Modern digital X-ray systems use less radiation than film X-rays used in the past.

The area in the body doctors are trying to view on an X-ray is not the only place receiving radiation. Some X-rays bounce around and travel beyond the intended area. This is called “scatter.” Scatter can give a small radiation dose to other organs in the body. Studies show using a shield outside the body to protect the sex organs does not reduce scatter within the body.

Shielding can make imaging less useful and increase radiation to the patient.

Sometimes, shielding can cover parts of the body doctors are trying to see in the image. If this happens, the X-ray does not give the best image for diagnosing illness. So, the staff might need to repeat the X-ray.

Modern medical X-ray machines adjust the amount of radiation they use while taking pictures. If a shield is present, the machine might not adjust properly and could use more radiation than needed. This can increase the patient’s radiation dose. It can also reduce image quality.

Protecting family members

Sometimes a family member is allowed to stay in the X-ray room with the patient. St. Jude staff will continue to require family members to wear lead aprons during these tests. It will shield them from any X-rays that scatter away from the patient.

Can you still shield my child?

Yes. Even though experts no longer recommend shielding, the staff can use a shield at your request to help calm a patient or family from any fear or anxiety.

Questions?

Do you have questions about radiation use in X-rays or why patient shielding is not used during these tests? Talk with your doctor, nurse, or the medical physicist on staff.

Cancel or reschedule MRIs right away if you can’t attend

Please call as soon as possible if your child will not be able to attend an MRI appointment. There is often a waiting list for MRI time slots. If you call early to cancel or reschedule, the staff can assign your unused MRI time slot to another patient.

If your child is having cold or flu symptoms, please call and talk to your child’s clinic staff to see if the scan should be rescheduled. This will save you a trip to the hospital if the clinic staff feels the scan should be cancelled until your child feels better.

Be sure to call the clinic staff as soon as you know that your child cannot make an MRI appointment. The staff and other patient families will be grateful for your help.

Theme weeks and activities planned for awareness month

September is Childhood Cancer Awareness Month and Sickle Cell Awareness Month. Volunteers from departments across St. Jude have planned fun and meaningful activities. The staff wants to honor the sacrifices patients and families make each day on their cancer and sickle cell journeys.

Each week will have a theme.

- September 3–6: Science Week
- September 9–13: Sports and Gaming Week
- September 16–20: Magic Week
- September 23–27: Superpower Week

Activities and giveaways are scheduled for inpatients, outpatients and caregivers. Enjoy fun science experiments, a gaming event, a magic show, superhero visits, special snacks and crafts.

The Guest Services information desks will have calendars. Look for the gold and red “We Honor You” logo around campus.
Oral syringes versus IV syringes

By Cheri Wilkerson, PharmD, and Steve Pate, PharmD, Pharmacy Services

Many times when we hear the word syringe, we think of one used to inject medicine into the body. But, a different type—an oral syringe—is used to give medicines by mouth. These syringes are a great way to measure oral liquid medicine, so each dose is correct.

For your child’s safety, make sure you know how to give each medicine the correct way. Here are a few things to remember:

• Listen carefully when your doctor, nurse or pharmacist describes how to give the medicine. Do not be afraid to ask questions about anything you do not understand. If you are unsure about something, ask them to repeat the instructions a second time.

• Read the prescription labels carefully to be sure you got the medicine in the proper form, such as a liquid or tablet.

• Throw out oral syringes after use with chemotherapy. For all other medicines, you can wash and re-use oral syringes unless the clinic doctor or nurse tells you not to.

• Oral syringes are only meant to be used by mouth. Usually, oral syringes are yellowish-brown or orange, except when a patient needs a dose larger than 10mls.

• Clear syringes usually are used to inject medicines through an IV, into a muscle (IM) or just under the skin (sub-Q).

• The tip of an oral syringe is different than the tip on an IV syringe. An oral syringe will not fit onto the end cap of a patient’s IV line. The syringe tips were designed this way to help prevent medicine errors.

• Store oral syringes away from IV syringes to avoid mistakes with your child’s medicines.

• Pre-filled oral syringes have a cap on the end to prevent the liquid medicine from leaking out. As soon as you are ready to give the medicine, remove this cap and throw it away to prevent your child from swallowing the cap and choking. There should never be a need to recap an oral syringe.

If you have questions about any of your child’s medicines, talk with a St. Jude pharmacist, doctor or nurse.