USER RESPONSIBILITIES & GUIDELINES FOR WEARING FETAL DOSIMETER BADGES

If you have been issued a fetal dosimeter, you must wear it at all times during the procedures/operation of equipment for which it is required. Performing procedures or operating equipment that requires the use of a dosimeter without wearing your assigned dosimeter constitutes unauthorized use.

Allowing others to use your dosimeter, or wearing someone else’s dosimeter while performing procedures/operating equipment that requires dosimetry is unauthorized.

Dosimeters are worn for a defined period of time. It is your responsibility to ensure that your dosimeter(s) are not worn beyond their end date, and to exchange it with the RAM/X-ray principal investigator in a timely fashion.

If you lose a dosimeter or do not turn one in that was issued to you, you are required to submit a log of activities that require dosimetry to the Radiation Safety Office upon request. There is also a $35 replacement/lost fee.

How is Fetal Dose Measured?

The fetal dose limit of 500 mrem includes fetal radiation exposure from external sources (e.g., scattered radiation from patients receiving x-rays, radiation from radioactive material) and from internal sources (e.g., inhaling airborne radioactivity from volatile radioactive material).

However, for all workers on campus, the contribution from internal sources is likely to be zero so the external dose is the main concern. The external dose is measured by radiation badges.

In addition to the regular body badge you normally wear, you will also be provided with a fetal dosimeter badge (“fetal badge”) that will be exchanged monthly.

• Wear your regular whole body badge where you normally wear that badge. For example, if you are wearing a lead apron, continue to wear the badge on the collar area on the outside part of the apron.

• Wear your fetal badge on the front part of your abdomen. If you are wearing a lead apron, wear the fetal badge underneath the apron.

• If you are wearing a lead apron, your fetal badge reading will be less than your collar badge reading. Also, keep in mind that maternal tissue can reduce scattered diagnostic x-rays by up to 70%.

• After the pregnancy is over, contact the Radiation Safety Office to indicate that you no longer need to be on the Fetal Monitoring Program.