

## **SUGGESTED RADIATION SAFETY PROCEDURES FOR USE OF X-RAY DURING SURGICAL PROCEDURES**

1. All persons, whether employees of the facility or not, who must remain in the surgical suite during the production of x-rays, must be supplied with and required to use a personnel monitoring device. The personal monitoring device must be worn at collar level and outside any lead apron or thyroid collar. If a second personal monitor is worn it shall be located at the waist and under the lead apron.
2. Only persons necessary to perform a procedure will be allowed to remain in a suite during the production of x-rays.
3. Any person remaining in a surgical suite during the production of x-rays must be supplied with and required to wear a lead apron of at least 0.25 millimeters equivalence, unless they are stationed behind a barrier specifically designed to shield persons from x-rays.
4. Any person remaining in a surgical suite during the production of x-rays shall position themselves as far away from the x-ray tube and the patient as is practicable during any x-ray production.
5. Radiographic machines shall only be used by employees of the facility who are trained to perform medical radiography and have demonstrated this competency to their employer.
6. Fluoroscopic machines shall only be controlled by employees of the facility, who are trained to operate all of the features of the specific fluoroscopes used at the facility in a safe manner.
7. Any physician performing a surgical procedure that includes the use of a fluoroscope, shall be trained to use dose reduction techniques for the patient, workers, and general public prior to being allowed to supervise any such procedure. This training must include an understanding of the output and scattering characteristics in all modes, orientations, and settings normally used on all types of fluoroscopes maintained at this facility. It should further require that each physician demonstrate competence in the use of all dose saving features available on any fluoroscope used at the facility.
8. All persons required to participate in surgical procedures that include the use of x-rays shall receive radiation safety training prior to any such assignment.
9. The staff shall record the total fluoroscopy time for each use. (The record should indicate the fluoroscope on time, not the procedure time.)
10. The facility shall perform and have records of measurements readily available for each fluoroscope used at each facility. Records shall at a minimum the exposure rates for an average patient for each frequently used setting and scatter measurements at several points around each fluoroscope where personnel are likely to be during procedures.