

SUPPLEMENTARY LOCAL RULES – MOBILE FLUOROSCOPY

This summary of the local rules is to be displayed where it is easily available to the operators of the x-ray equipment. For further details please refer to the main local rules.

Radiation Protection Supervisor

Radiation Protection Adviser

Controlled Area Extent

Fluoroscopy must only be undertaken in areas that feature radiation shielding. These areas are:

- Theatres 1 and 2 in Phase 1 theatres
- Theatres 9, 10, 11 and 12 in Phase 2 theatres
- Endoscopy suite

A controlled area exists within these rooms when the x-ray unit is energised.

Key Work Instructions

1. During x-ray exposures all persons present in the controlled area must wear protective clothing and ensure that they are as far away from the patient and x-ray tube as possible.
2. Protective gloves must be worn if patients are handled during fluoroscopy. Protective gloves and aprons do not provide adequate protection from the primary beam.
3. The operator should take care to ensure when initiating the exposure that everyone in the room is safely positioned and that they can see the patient and entry doors. Room doors should be closed prior to exposures being made.
4. When examinations are undertaken in rooms with manually activated room warning lights, these must be activated by the operator prior to exposures being made.
5. When the x-ray equipment is left unsupervised, the person who was in charge of the last examination must ensure that it is left so that others may enter without fear of accidental irradiation. Keys must be removed from mobile equipment when not in use.
6. During fluoroscopy, the lowest dose-rate setting possible should be used, compatible with the desired clinical outcome. Use should be made of any equipment dose-saving features. The anti-scatter grid should be removed when possible, consistent with the image quality requirements of the examination. Use should be made of any additional shielding present provided that it does not interfere with the conduct of the examination. During lateral projections, staff should try to avoid standing on the same side of the patient table as the x-ray tube.
7. Lead aprons must be thoroughly examined at least annually. Any defects must be reported to the RPS.
8. Lead aprons must be stored by the wearer in a suitable manner to prevent damage.

Contingency Plans

1. If the x-ray unit fails to terminate the production of x-rays at the end of the set time, or if the operator believes there may be a fault with the x-ray unit, it must immediately be isolated from the mains supply. The unit should be taken out of use and a notice indicating the problem should be attached to it. The RPS must be informed. The unit should not be used again until the incident has been investigated and the cause rectified.
2. If it is suspected that an employee or patient has received an overexposure of radiation, or if the radiation monitoring indicates that an overexposure has been received, the RPS must be informed. They must ensure that an investigation is carried out in line with departmental procedures.
3. Mobile fluoroscopy can only be undertaken in unshielded theatres in emergency situations when a shielded theatre cannot be used. Permission must first be sought from the RPS.