

KINGSTON GENERAL HOSPITAL

IMAGING SERVICES DEPARTMENT MANUAL

Subject: Safe Work Procedure for Fluoroscopy

Number: 17-001(2)

Prepared by: Director, Imaging Services

Page: 1 of 2

Original Issue: 2005.07

Reviewed by: Department Head

Last Revision: 2009.08

Date Revised: 2013.08

POLICY:

Fluoroscopic procedures are performed throughout Kingston General Hospital (KGH) for diagnostic, interventional, surgical and experimental purposes.

It is the policy of Kingston General Hospital that all authorized staff working with fluoroscopy equipment be aware of the following procedure to ensure compliance with all pertinent regulatory requirements and also to ensure that personal exposures are kept As Low As Reasonably Achievable (ALARA).

PROCEDURES:

A. Authorization to operate fluoroscopy equipment

Fluoroscopy equipment throughout KGH may only be operated by physicians or medical radiation technologists with current registration with the College of Medical Radiation Technologists of Ontario and in compliance with the Canadian Healing Arts Radiation Protection Act, Occupational Health & Safety, X-ray Safety and Safety Code 35. Operation of the machine includes plugging it in and setting it up.

B. Responsibilities

The person or persons authorized to operate fluoroscopy equipment (see A) must ensure the following:

- Only authorized personnel are present in working areas.
- No one is present in the room other than those essential for the exposure when equipment is operated.
- The door to the room is firmly closed and physically secured prior to exposure* and an approved caution sign on the door.
 - In cases where there is no emergency door into the room, the primary door must be closed but not locked.
- That fluoroscopy time is kept to the minimum necessary for the particular procedure.
- That the image intensifier be positioned as close to the patient as is practical.
- That optimum collimation and appropriate magnification be used and that exposure reduction factors are maximized in order to ensure that doses are kept As Low As Reasonably Achievable.
- That female patients of childbearing age (between 10 and 65 years of age) be asked whether there is any chance that they are pregnant. In the event of a suspected or actual pregnancy, the physician and radiologist must consider the risks and benefits of the examination in light of the potential dose to the fetus. The medical physics department can be consulted for dose determination to the fetus and the radiation protection department can advise on risks.
- That personal be positioned behind the control area shielding so that there is no direct line of site from the person to the target of irradiation whenever possible.
- Fluoroscopy rooms are used for only 1 patient at a time.

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C. Dosimetry

- All authorized personnel must wear Thermo Luminescent Dosimeters (TLD) or Optical Stimulated Luminescence Dosimeter (OSL) when in Fluoroscopy rooms or control areas.
- Personnel wearing portable shielding should wear their TLD or OSL at the appropriate location beneath the portable shielding (whole body TLD should be worn between neck and waist and under two layers of lead and the neck dosimeter is worn outside on the thyroid collar).

D. Protection

- Any person in the fluoroscopy room at the time that the patient is exposed must wear a whole body lead apron and should wear a thyroid protector.
- Lead shielding is available for the hands but is not required when in the operating room at the time of exposure.
- Whenever possible, the patient must wear a lead apron during exposures.
- Many fluoroscopy rooms are equipped with a moveable lead lined plexiglass shield. This shield should be positioned between the entry point of the beam and the people nearest this point.

E. Reporting Incidents

- Any potential incidents must be reported to the Radiation Protection Officer or designate.
- All other applicable incident forms must be filled in. See the charge technologist to find out which forms are required.

F. Between Operations

The operating pedal should be stowed securely away from errant feet between cases.

G. Turning the Equipment Off at the End of the Working Day

- At the end of the working day, the authorized user must ensure that the fluoroscopy apparatus is turned off.
- The operating pedal should be securely stowed in the designated area.

Authorizing Signature:

Dr. Annette McCallum
Department Head