

KINGSTON GENERAL HOSPITAL

IMAGING SERVICES DEPARTMENT MANUAL

Subject: Safe Work Procedure for General Radiography **Number:** 17-001(3)

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:

General radiography 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 general radiology 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 general radiography equipment

General radiography 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 general radiography equipment (see A) must ensure the following:

- Only authorized personnel or personnel essential for the critical care of the patient are present in working areas.
- No one is present in the room other than those essential for the exposure when the exposure is taken.
- The door to the room is firmly closed prior to exposure and an approved caution sign on the door.
- That any individuals not wearing protective shielding be positioned behind the control area shielding (when available) so that there is no direct line of site from the person to the target of irradiation.
- Optimum collimation must be used and that exposure reduction factors are maximized in order to ensure that doses are kept As Low As Reasonably Achievable.
- Radiography rooms are used for only 1 patient at a time.
- 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.

C. Dosimetry

- All authorized personnel must wear Thermo Luminescent Dosimeters (TLD) or Optical Stimulated Luminescence Dosimeter (OSL) when in General Radiography rooms or control areas.

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- 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

- Protection in the control room is designed against scatter radiation and not to protect from the direct beam. Therefore, the direct beam should never be aimed towards the control room.
- Any person in the radiography 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 radiography room at the time of exposure.

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.

Authorizing Signature:

Dr. Annette McCallum
Department Head