

The Ionising Radiation (Medical Exposure) Regulations 2017 (IRMER) and Ionising Radiation (Medical Exposure) Regulations (Northern Ireland) 2018

SUMMARY:

The responsibilities for any medical exposure are shared between:

Referrer	The referring clinician, i.e. the clinician who completes and signs the request form.
Practitioner	A member of staff who is appropriately trained to justify the exposure, i.e the clinical staff who checks the request and decides it is appropriate.
Operator	A member of staff who is appropriately trained to operate the equipment, i.e. usually the radiographer who makes the exposure.

1. SPECIFIC RESPONSIBILITIES:

Employer	<ul style="list-style-type: none"> • To ensure that a framework of written protocols is in place for all examinations (found on the intranet/shared drive). • To ensure that there are procedures in place, to enable staff to comply with the regulations. • To establish referral criteria for medical exposures and ensure that these are made available to all referrers (RCR guidelines and departmental guidelines). • To ensure that an individual patient is informed of the benefits and risks of a procedure prior to the exposure taking place. • To ensure that all practitioners and operators are appropriately trained. • To ensure that clinical audits are carried out in accordance with national procedures. • To keep records of all practitioners and operators and their training log. • To keep records of all ionising radiation equipment and to prevent its proliferation.
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Referrer	<ul style="list-style-type: none"> To supply enough clinical information to allow the practitioner to justify an individual exposure i.e. fills out the request card correctly.
Practitioner	<ul style="list-style-type: none"> To justify each individual exposure in terms of net benefit to the patient i.e. decides that it is an appropriate request.
Operator	<ul style="list-style-type: none"> To carry out each procedure in accordance with the Employer's protocol. See IRMER and Information folders for patient ID, LMP protocols etc. To use professional judgement to ensure patient dose is as low as reasonably practical (ALARP).

A single individual may be for example both:

- Referrer and Operator (e.g. Radiographer who decided that further view not originally requested are necessary).

OR

- Practitioner and Operator (e.g. Radiographer justifying a general x-ray request).

The term "Operator" also includes those members of staff who can test and or calibrate equipment.

2. DEPARTMENT PROCEDURES

Written procedures exist for:

- The positive identification of patients (see Patient ID protocol).
- Establishing the pregnancy status of female patients of child bearing age (see LMP protocol).
- Quality assurance of exam protocols and departmental procedures
- Recording the evaluation of examinations, including factors relevant to patient dose (exam exposures entered on Lumeon on patient record).
- Reporting any known or suspected radiation incidents (inform your manager immediately and fill out an incident form available on intranet/shared drive).

3. EXAMINATION PROTOCOLS

- Standard Operating Protocols must be written for all examinations.
- These protocols must include Diagnostic Reference Levels (reference dose).
- Special consideration must be given to dose limitation in the case of children, nursing mothers (nuclear medicine) and medico-legal examinations.

4. REFERENCE DOSES

- Diagnostic Reference Levels (DRL), in line with the UK or European standards must be established for all examinations.

5. PROCEDURE AUDIT

- An operator may depart from a written protocol and /or exceed a DRL providing that it can be justified in terms of net benefit to the patient.
- All such incidents must be recorded and be subject to effective audit.

6. JUSTIFICATION

- A radiographer may be designated to act as a Practitioner in a specific area and may justify a limited range of procedures as defined by a written protocol.
- All procedures must be justified prior to the examination taking place.

7. OPTIMISATION OF PATIENT DOSE

- Each person involved in a medical exposure must use their professional judgement to ensure that the patient dose is ALARP, consistent with the “intended purpose” of the examination

8. CLINICAL EVALUATION

- A clinical evaluation [i.e. report] must be recorded of the outcome of every clinical exposure. The responsibility for producing such a report does not, necessarily rest with the Radiology Department.

9. EXPERT ADVICE

- An appropriately qualified and experienced physicist must be available to give advice on all diagnostic procedures.
- This appointment should be considered as being distinct from Radiation Protection Adviser (RPA) responsibilities.

10. RESEARCH

- IR(ME)R includes all medical research programmes involving ionising radiation.