STATUTORY INSTRUMENTS

2000 No. 1059

The Ionising Radiation (Medical Exposure) Regulations 2000

Optimisation

7.—(1) In relation to all medical exposures to which these Regulations apply except radiotherapeutic procedures, the practitioner and the operator, to the extent of their respective involvement in a medical exposure, shall ensure that doses arising from the exposure are kept as low as reasonably practicable consistent with the intended purpose.

(2) In relation to all medical exposures for radiotherapeutic purposes the practitioner shall ensure that exposures of target volumes are individually planned, taking into account that doses of non-target volumes and tissues shall be as low as reasonably practicable and consistent with the intended radiotherapeutic purpose of the exposure.

(3) Without prejudice to paragraphs (1) and (2), the operator shall select equipment and methods to ensure that for each medical exposure the dose of ionising radiation to the individual undergoing the exposure is as low as reasonably practicable and consistent with the intended diagnostic or therapeutic purpose and in doing so shall pay special attention to—

(a) quality assurance;

(b) assessment of patient dose or administered activity; and

(c) adherence to diagnostic reference levels for radiodiagnostic examinations falling within regulation 3(a), (b), (c) and (e)

as set out in the employer's procedures.

(4) For each medical or biomedical research programme falling within regulation 3(d), the employer's procedures shall provide that—

(a) the individuals concerned participate voluntarily in the research programme;

(b) the individuals concerned are informed in advance about the risks of the exposure;

(c) the dose constraint set down in the employer's procedures for individuals for whom no direct medical benefit is expected from the exposure is adhered to; and

(d) individual target levels of doses are planned by the practitioner for patients who voluntarily undergo an experimental diagnostic or therapeutic practice from which the patients are expected to receive a diagnostic or therapeutic benefit.

(5) In the case of patients undergoing treatment or diagnosis with radioactive medicinal products, the employer's procedures shall provide that, where appropriate, written instructions and information are provided to—

(a) the patient, where he has capacity to consent to the treatment or diagnostic procedure; or

(b) where the patient is a child who lacks capacity so to consent, the person with parental responsibility for the child; or

(c) where the patient is an adult who lacks capacity so to consent, the person who appears to the practitioner to be the most appropriate person.

(6) The instructions and information referred to in paragraph (5) shall—

(a) specify how doses resulting from the patient's exposure can be restricted as far as reasonably possible so as to protect persons in contact with the patient;

(b) set out the risks associated with ionising radiation; and

(c) be provided to the patient or other person specified in paragraph (5) as appropriate prior to the patient leaving the hospital or other place where the medical exposure was carried out.

(7) In complying with the obligations under this regulation, the practitioner and the operator shall pay special attention to—

(a) the need to keep doses arising from medico-legal exposures as low as reasonably practicable;

(b) medical exposures of children;

(c) medical exposures as part of a health screening programme;

(d) medical exposures involving high doses to the patient;

(e) where appropriate, females in whom pregnancy cannot be excluded and who are undergoing a medical exposure, in particular if abdominal and pelvic regions are involved, taking into account the exposure of both the expectant mother and the unborn child; and

(f) where appropriate, females who are breastfeeding and who are undergoing exposures in nuclear medicine, taking into account the exposure of both the female and the child.

(8) The employer shall take steps to ensure that a clinical evaluation of the outcome of each medical exposure, is recorded in accordance with the employer's procedures or, where the employer is concurrently practitioner or operator, shall so record a clinical evaluation, including, where appropriate, factors relevant to patient dose.

(9) In the case of fluoroscopy—

(a) the operator shall ensure that examinations without devices to control the dose rate are limited to justified circumstances; and

(b) no person shall carry out an examination without an image intensification or equivalent technique.