THE RADIOLOGICAL PROTECTION CENTRE
Incorporating The John Perry Laboratory

IONISING RADIATION MEDICAL EXPOSURES (IRMER) 2017

ABOUT THE COURSE:
The main regulations governing the use of ionising radiations in radiological imaging have recently undergone a major revision. The new Ionising Radiation (Medical Exposure) Regulations 2017 (IRMER17) state that "no practitioner or operator shall carry out a medical exposure or any practical aspect without having been adequately trained" (Reg 17). Adequate training is defined as that which satisfies the syllabus set out in Schedule 3 of IRMER17. The new Ionising Radiations Regulations 2017 (IRR17) include revised dose limits to radiation workers and the need for radiation employers to co-operate about the exposure of their staff.

This one-day course is designed to meet the theoretical training requirements ofIRMER17 Schedule 3 and also covers the essential regulations of IRR17. The course cannot provide the equipment- and technique-focussed practical training that Schedule 3 also refers to which must be provided by the employer. A certificate of theoretical training is provided.

The course is designed for clinical staff who have been identified by their employer as a practitioner (those who justify exposures) and/or an operator (those who carry out any practical aspects). The course is specifically for those who are involved in diagnostic X-ray exposures such as cardiologists, endoscopists, anaesthetists and surgeons. This course is **not** designed for nurses or other extended-scope health professionals*. More suitable courses would be RPC's half day course on Radiation Protection for Non-medically Qualified Referrers course or the full day Radiation Protection for Health Professionals. Please contact RPC for further details.*

Course Fee: £150.00

There is a reduced fee of £50 for staff who are solely employed by St George's University Hospitals NHS Foundation Trust

ICRP and the Need for Training (IRMER17 Reg 12 & 17) IRMER17 and ICRP statements on training of practitioners and operators, training records and CQC requirements
Biological Effects of Radiation Ionising radiation, interactions in human tissue, DNA damage, stochastic & deterministic effects, epidemiological studies, derivation of factors
Basic Physics and Principles of Imaging History of imaging, basic physics, radiation units, x-ray production, principles of imaging, imaging modalities
Radiation Exposure and Putting Risk into Context Background radiation, natural and artificial sources, risks from diagnostic radiological exams, contextualising risk, beneficial effects of radiation
Radiation Effects on the Fetus Stochastic & deterministic effects on the fetus, risks to fetus from different exams, RCR guidance, pregnancy rule
Regulations 1: Ionising Radiation (Medical Exposures) Regulations 2017 (IRMER17) Summary of key regulations: protection of patient, licencing of radioactive substances, referrers, practitioners, operators, justification, optimisation, expert advice, imaging equipment, training , dealing with incidents
Regulations 2: Ionising Radiations Regulations 2017 (IRR17) Summary of key regulations: risk assessment, Restriction of exposure, dose limits, classified workers, controlled areas, local rules, RPS, RPA, Co-operation between employers, dealing with incidents
Employer's Procedures Summary of employer's procedures requiredrisk under Schedule 2 of IRMER17
Occupational Doses and Protection for Staff Occupational doses, personal dose monitoring, protection for staff, scatter doses, dose limits, investigation levels, HSE investigations
Radiation Equipment: Duties of the Employer (IRMER Reg 15 & 16) Equipment Lifecycle, installation & critical examination, commissioning, equipment Inventory, QA
Patient Dosimetry and DRLs (IRMER Reg 12 (3b,c)) National dose surveys, diagnostic reference levels, local dose audit, taking action on high doses
Optimisation (IRMER Reg 12) IRMER17 Reg 12, definition of optimisation, ALARP, protocols, exposure charts, examinations requiring special attention, pregnant or breast feeding patients