

Title of Document:	IR(ME)R PROCEDURE (K) - To ensure that the probability and magnitude of accidental or unintended exposure to individuals from radiological practices are reduced so far as reasonably practicable
Directorate:	RADIOLOGY DIRECTORATE

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Approval committee:	RADIOLOGY DIRECTORATE GOVERNANCE MEETING
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Key amendments:	Date:
Information added around patient dose audits and LDRLs plus corrective actions following radiation incidents.	13.03.2024
Added rationale for pause and check. Added link to SOR in reference to modality specific pause and checks.	14.01.2026
Individuals involved in developing / reviewing / amending this document:	
Clinical Services manager	
Radiation Protection Advisor	
Quality Governance Lead Radiographer	
Radiation Protection Supervisors	
Key staff responsibilities	Post:
Responsible for ensuring that the SOP is followed on all sites.	Radiology Clinical Services Manager
Responsible for the day to day implementation of the SOP, and for Preventative maintenance and repair:	Lead Superintendent Radiographers for each site
To comply with this procedure and all related proceduresEnsure Equipment fault and incident reporting is completed and ensure adequately trained on equipment operation	All IR(ME)R Operators
Quality Assurance	QA radiographer / Medical Physics Expert (MPE)
To complete or delegate completion of the IRMER procedure audits	RPS

In-line with regulation 6 schedule 2 requirements within IRMER 2024 (Amendment) Regulations, the purpose of this procedure is to limit the likelihood and extent of accidental or unintended exposure of patients.

This procedure explains the processes we follow to limit the above and covers all medical exposures within Diagnostic X-ray, Nuclear Medicine, Cardiology and Interventional Radiology, exposures to which these regulations apply.

The employer must establish a system for—

- (a)recording analyses of events involving or potentially involving accidental or unintended exposures proportionate to the radiological risk posed by the practice; and
- (b)the taking of any appropriate action in relation to such analyses.”.

Practice:

PAUSE and CHECK procedures must be followed prior to any radiation exposure including the administration of radionuclides. Modality specific PAUSE and CHECK can be found on the SoR website.

1. Ensure we have the correct patient, the identity of the patient is checked prior to any radiation exposure, following IRMER procedure (A)
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2. To ensure were appropriate, that enquiries are made of individuals of childbearing age if they are pregnant or breastfeeding, according to the IRMER procedure (C).
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3. Equipment, where appropriate, is subject to a regular preventative maintenance programme to ensure equipment is in working order prior to radioactive exposure.
4. Equipment is subject to a Quality Assurance (QA) programme:
 - commissioning tests before it is first used for clinical purposes.
 - Testing at regular intervals and after any major maintenance.
 - Representative patient dose assessments - patient dose audits and Local Diagnostic Reference Levels (LDRL) reviews are undertaken by your MPE. Examinations will be optimised where averages significantly exceed DRL's.

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5. Regular QA and audits (including monthly reject analysis) of procedures undertaken by RPS but this may be delegated to an alternative appropriate member of staff.
6. Equipment that exhibits faults is likely to cause patient dose overexposure is taken out of use until repaired. Equipment faults are reported to Site Superintendent and logged onto the countywide fault log spreadsheet.

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7. In the event of a breakdown, the relevant modality breakdown SOP must be followed:

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8. A formal procedure is followed for hand-over of equipment for maintenance or repair. Handovers must be recorded on a standardized AXREM form:

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9. All operators undergo appropriate in-house training on the operation of equipment or tasks. With associated competency records:

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10. All incidents are reported and investigated following the Worcestershire Acute Hospitals NHS Trust Incident Reporting Policy (Datix).

https://nhs.sharepoint.com/sites/RWP_Clinical_Governance_Hub/SitePages/Datix--.aspx?promotedState=0

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11. All radiation incidents are recorded on a County widespread sheet. Root cause can be identified:

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12. All incidents are submitted to Datix and assigned to a member of the Radiology team to investigate . Shared learning opportunities are created and sent Countywide. The

Site Superintendent radiographer (or delegated member of staff) will perform a formal one to one discussion and request a reflective piece of work be created. All documentation relating to the incident will be attached to the DATIX incident for clarity.

13. Following the formal One to one with the site Superintendent Radiographer a recurring theme may be identified and actions put in place proportional to the incident. All Actions will be recorded with in the Datix system. A typical action could be a period of supervised practice.
14. Incidents are discussed at Radiology Directorate Governance Meetings. A monthly report from DATIX is discussed. And feedback is provided to staff on the monthly Quality Governance (QG)Updates where themes are itemized. Reading compliance for the QG updates is monitored on DAVE acknowledgement platform.
15. Where appropriate and identified corrective actions such as staff retraining or updating procedures will be carried out.
16. All radiation are tabled separately and also reviewed at the Radiation Protection Committee utilising the Annual RPC report created by our medical Physics Providers Ratified Minutes of bi yearly Radiation Protection Committee meetings are available to staff on Team Share Point. Radiation incidents are reviewed by modality, duty holder and root cause. The reports also compare incident levels to the previous year.
17. All unintended radiation incidents must be reported following the radiation incident flow chart (appendix A).

Appendix A:

<M:\Acute\Radiology\Radiology Team Share Point\RADIATION PROTECTION inc LOCAL RULES\RADIATION INCIDENT FLOWCHART.pdf>