

How to Perform an MRI Safety Audit

An MRI safety audit is a structured review of the policies, procedures, facilities, equipment and staff practices that underpin safe MRI operation. Regular audits help organisations demonstrate compliance with MHRA guidance, identify areas for improvement and reduce the risk of MRI-related incidents.

1. Governance and Documentation

- Appointment of the MR Responsible Person (MRRP), MR Safety Expert (MRSE) and any MR Safety Officers (MRSOs).
- Availability and currency of local rules, safety policies, standard operating procedures and risk assessments.
- Evidence of incident reporting, investigation and corrective actions.

2. Staff Training and Competency

- Training records for all staff entering MRI controlled areas.
- Designation of MR Authorised Persons at different levels: Supervisor, MR Environment, Non-MR Environment

3. Patient and Personnel Screening

- Review of patient screening questionnaires and workflows.
- Screening processes for staff, visitors and accompanying persons before entry to the MR Controlled Access Area.

4. MRI Environment and Access Control

- Verification of controlled access arrangements (including management) and defined MR Environment and MR Controlled Access Area.
- [Appropriate safety signage and warning notices.](#)

5. Emergency Preparedness

- Procedures for medical emergencies, cardiac arrest, fire, magnet quench and power failure.
- Availability and suitability of MR Conditional emergency equipment (e.g. MR Conditional trolley)
- Records of emergency drills for fire and medical emergencies in MRI and staff participation.

6. Equipment and Facility Safety

- Management of MR Safe, MR Conditional and MR Unsafe items.
- Quench pipe inspection records and maintenance arrangements.

7. Clinical Practice

- Observation of routine patient workflows and compliance with screening and safety procedures.
- Management of high-risk patients and off-label scanning decisions.
- Hearing protection and patient monitoring practices – continuous monitoring of patients when scanning in first level mode.

The audit should identify areas of good practice, non-conformances and opportunities for improvement. Findings should be prioritised according to risk and assigned to responsible individuals with agreed completion dates. Re-audit should be undertaken to verify that corrective actions have been implemented and sustained.