

MRI Safety Program Assessment Checklist

The following represents guidance to the reviewer conducting the MRI Safety Program Assessment Checklist. It should be understood that the checklist is not to be only an indication that a specific policies or practices exist, but that the reviewer is to identify that the policy or practice is qualitatively appropriate to the site's operations, MRI equipment, and physical environment. Under each performance item are bullet-point questions to help the reviewer evaluate the appropriateness and completeness of policy or practice items which appear on the checklist.

The Site's written MRI Safety policy addresses the following:

Designated MR Medical Director (MRMD)

- Do policies identify specific duties of the MRMD?
- Do policies identify the individual appointed to the role of MRMD?
- Do policies speak to specific training / competencies / certifications for the MRMD?

Designated MR Safety Officer (MRSO)

- Do policies identify specific duties of the MRSO?
- Do policies identify the individual appointed to the role of MRSO?
- Do policies speak to specific training / competencies / certifications for the MRSO?

Designated MR Safety Expert (MRSE)

- Do policies identify specific duties of the MRSE?
- Do policies identify the individual appointed to the role of MRSE?
- Do policies speak to specific training / competencies / certifications for the MRSE?

Documented MR Safety Education / Training for all Personnel

- Do policies define levels of MRI safety education / training required of different roles in the MRI suite?
- Do policies define specific training content and / or competency measures for each level of MRI safety education / training?
- Do policies define specific education / training intervals?
- Do policies define what is to happen if an individual does not maintain up to date MRI safety education / training?

Site Access Restrictions (MR Zones)

- Do policies appropriately identify which areas are to be restricted for MRI safety?
- Do policies provide clear association between MRI safety training levels and MRI suite access privileges?
- Does the site maintain a list of individuals who are permitted independent MRI suite access and their MRI safety training status?

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Patient and non-MR Personnel Screening

- Do policies provide for uniform and consistent documented screening of all patients?
- Do policies provide for uniform and consistent documented screening of all employees / caregivers who work within the secured MRI area?
- Do policies identify screening practices for “unreliable historians” (e.g., altered, impaired, communication-barrier, etc...)?
- Do policies identify patient preparation / gowning provisions required?
- Do policies identify the appropriate use of physical screening adjuncts (i.e., ferromagnetic detection)?

Device and Object Screening

- Do policies identify process / methodology for exam approval for patients with objects / devices that have manufacturer MR safety labeling?
- Do policies identify process / methodology for the evaluation of objects / devices / foreign bodies for which there is no MR safety labeling?

Designation of MR Safe / MR Conditional Status

- Do policies identify process / methodology for site designation of “MR Safe” or “MR Conditional” status for objects for which there is incomplete manufacturer / vendor information?
- Do policies identify process / methodology for verification of MRI safety labeling of objects brought to the MRI suite from elsewhere?

Pediatric Patients

- Do policies provide for both parent / guardian and private clinical screening for pediatric / adolescent patients?

Acoustic Noise

- Do policies require / recommend the use of hearing protection for any person in the MRI scanner room during the MRI examination?
- Do policies provide for user instruction on proper ‘fit and function’ of hearing protection?
- Do policies provide for alternative means of hearing protection if the first option is not feasible (e.g., ear muffs that won’t fit in a head coil or a patient who refuses to put foam plugs in their outer ear)?

Patient Communication

- Do policies provide for medical translator / interpreter services when screening MRI patients whose language proficiency does not match that of the MRI staff?
- Do policies require the use of a patient notifier device (i.e., squeeze ball) or continuous acoustic monitoring (i.e., open intercom channel) during MRI examinations of conscious patients?

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Pregnant Patients and Staff

- Do policies identify relative risk and clinical decision-making process of each non-contrast and contrast-enhanced MRI exams of patients who are (or may be) pregnant?
- Do policies identify relative occupational risk of static and time-varying magnetic field exposure to pregnant staff, and define permitted workplace activities / restrictions accordingly?

Contrast Agent Safety

- Do policies direct actions with respect to distribution of FDA-required contrast patient information forms?
- Do policies define clinically acceptable contrast risks (e.g., renal function, prior allergic response, etc...)?
- Do policies describe agent / dosing / delivery parameters for contrast administration?
- Do policies describe actions with respect to extravasation / contrast reaction?

Thermal Burns

- Do policies describe actions with respect to patient screening (clinical and physical) and preparation (e.g., gowning) to minimize risk of patient focal heating?
- Do policies describe actions with respect to patient positioning / padding and transmit coil use to minimize the risk of patient focal heating?

Sedation / Anesthesia

- Do policies describe actions with respect to self-medicated patients, competency, and discharge or release to drive?
- As applicable, do policies describe specific MRI safety training / competency requirements for clinicians (e.g., anesthesia, respiratory) providing supporting clinical monitoring / care during MRI exams?

Emergency Code Procedures

- Do policies describe actions with respect to emergency response for various emergent situations, including medical emergency, security situation, and fire?
- Do policies describe code drill requirements (frequency, announced vs. unannounced)?
- Do policies identify an individual(s) with coordination responsibility with local emergency response personnel?

Magnet Quench (as applicable)

- Do policies describe when to initiate an MRI quench (vs. an emergency power-off), and which individuals are authorized to initiate an MRI quench?

Cryogen Safety (as applicable)

- Do policies indicate documented annual inspection of the MRI quench pipe assembly?
- Do policies describe requirements for education / training for any person working near the quench pipe discharge point (e.g., roofing or air-conditioning repair personnel).

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Reporting of MR Safety Incidents or Adverse Events

- Do policies describe requirements for reporting of adverse events or 'near-miss' / 'good catch' events to the MRMD or other internal departments (e.g., quality, compliance, risk)?

Infection Control & Medical Waste

- Do policies describe requirements for MRI area cleaning, including access for environmental services, normal and terminal cleaning?
- Do policies describe requirements for use of staff PPE based on potential infection / contamination risk?

Written Policies are Present and Readily Available to Facility Staff

- Are the most contemporary versions of written MRI safety policies readily available to facility staff (either physically or electronically)?

Written Policies are Reviewed and updated on a Regular Basis

- Have written MRI safety policies been reviewed / updated / re-endorsed within the past 12 months?
- Are written MRI safety policies endorsed by the current MRMD (clinical) and radiology administrator (operational)?
- Do policies include citations / references to contemporary standards or best-practice documentation, when applicable?

Facility has Appropriate MR Safety Warning Signage and Methods of Controlled Access

- Does the facility have an illuminated "Magnet Always On" sign with a battery backup at the entrance(s) to the MRI scanner room(s)?
- Does the facility have warning signage that describe hazards and access restrictions, minimally at entrances to Zones III and IV?
- Does the facility have / use non-combination locking devices to prevent unauthorized access into Zone III and IVs?