

Risk Assessment Form

Use this form for any detailed risk assessment unless a specific form is provided. Refer to your Summary of Hazards/Risks and complete forms as required, including those that are adequately controlled but could be serious in the absence of active management. The Action Plan and reply section is to help you pursue those requiring action.

Name of Initial Assessor/Reviewer:	John McLean	Post Held:	MR Safety Expert
Department:	Imaging	Date (Initial Review):	17/3/2015
Subject of Assessment: E.g.: hazard, task, equipment, location, people			
Scanning patients with MRI where cables or wires from external monitoring equipment are connected to the patient			
Hazards (Describe the harmful agent(s) and the adverse consequences they could cause)			
The radiofrequency power the MRI scanner uses to acquire images can couple with metal wires and induce currents which can lead to heating. If these wires come into contact with the patient then this can lead to a burn occurring.			
Description of Risk Describe the work that causes exposure to the hazard, and the relevant circumstances. Who is at risk? Highlight significant factors: what makes the risk more or less serious – e.g.: the time taken, how often the work is done, who does it, the work environment, anything else relevant.			
Patients undergoing MRI scans with monitoring equipment are at risk. Patients undergoing MRI scans while under anaesthesia are particularly vulnerable due to the fact they will necessarily have monitoring equipment whilst being scanned and because of their inability to respond to, and alert staff of, any heating.			

Existing Precautions

Summarise current controls in place	Describe how they might fail to prevent adverse outcomes.
<p>All monitoring equipment suitable for use within the MRI magnet room is marked as either MRI safe or MR conditional. Safe conditions of use are marked on individual pieces of equipment as necessary</p> <p>Only MR safe ECG leads shall be used. These leads are carbon fibre, not metal, so high impedance should prevent significant current induction.</p> <p>Only MR safe ECG electrode contacts shall be used</p> <p>Only MR safe Pulse oxymeter devices and leads shall be used in MRI. These are fibre optic so this will prevent current induction.</p> <p>Adequate training in placement of receiver coils, cables and patients (no loops) to minimise current induction.</p> <p>Patients asked to press buzzer if heat felt.</p>	<p>Most often burns to patients which have occurred as a result of wires in the MRI scanner are caused by those wires not being of MR safe or MR conditional variety. A member of staff could inadvertently bring a MR unsafe wrong piece of equipment into the MRI area which may subsequently be used.</p>

<p>Position all ECG leads to be led out centrally from the bore and not near the bore periphery.</p> <p>Ensure the patient is instructed to inform staff immediately if they feel any warming</p> <p>Annual training of MRI staff and anaesthetic staff working in MRI to remind staff of the dangers involved.</p>	
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Level of Risk - Is the control of this risk adequate?

Give more than one risk level if the assessment covers a range of circumstances. You can use the 'matrix' to show how 'likelihood' and 'consequences' combine to give a conclusion. Also, be critical of existing measures: if you can think how they might fail, or how they could be improved, these are indications of a red or orange risk.

Risk Matrix

<u>Likelihood</u>	<u>Impact/Consequences</u>				
	Negligible	Minor	Moderate	Major	Extreme
Almost Certain	Medium	High	High	V High	V High
Likely	Medium	Medium	High	High	V High
Possible	Low	Medium	Medium	High	High
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Low	Medium	Medium

Very High
 High
 Medium
 Low

Current risk level

Given the current precautions, and how effective and reliable they are, what is the current level of risk? **Green** is the target – you have thought it through critically and you have no serious worries. Devise ways of making the risk green wherever you can. **Yellow** is acceptable but with some reservations. You can achieve these levels by reducing the inherent risk and or by effective and reliable precautions.

High (Orange) or Very High (Red) risks are unacceptable and must be acted on: use the Action Plan section to summarise and communicate the problems and actions required.

Action Plan (if risk level is High (Orange) or Very High (Red))

Use this part of the form for risks that require action. Use it to communicate, with your Line Manager or Risk Coordinator or others if required. If using a copy of this form to notify others, they should reply on the form and return to you. Check that you do receive replies.

Describe the measures required to make the work safe. Include hardware – engineering controls, and procedures. Say what you intend to change. If proposed actions are out with your remit, identify them on the plan below but do not say who or by when; leave this to the manager with the authority to decide this and allocate the resources required.

Proposed actions to control the problem <small>List the actions required. If action by others is required, you must send them a copy</small>	By Whom	Start date	Action due date

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Action by Others Required - Complete as appropriate: (please tick or enter YES, name and date where appropriate)

Report up management chain for action	
Report to Estates for action	
Contact advisers/specialists	
Alert your staff to problem, new working practice, interim solutions, etc	

Reply

If you receive this form as a manager from someone in your department, you must decide how the risk is to be managed. Update the action plan and reply with a copy to others who need to know. If appropriate, you should note additions to the Directorate / Service Risk Register.

If you receive this as an adviser or other specialist, reply to the sender and investigate further as required.

Date of last review: As per QPulse record

Next review date: As per QPulse record