



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):	2/4/2015

Subject of Assessment: E.g.: hazard, task, equipment, location, people

Scanning patients in MRI with tattoos while under General Anaesthetic. This risk assessment also covers concerns around metal containing semi-permanent make-up.

Hazards (Describe the harmful agent(s) and the adverse consequences they could cause)

The RF field generated by the MRI scanner is the source of concern here

Description of Risk

While very rare, there have been incidences of patients with tattoos receiving burns while being scanned by MRI. It is thought that this occurs as a result of metal containing compounds in the tattoo or make-up dye which when exposed to the RF radiation can induce currents in the tattoo leading to a burn. Burns of this type tend to be superficial and transient in nature. Their occurrence is unpredictable as many variables are involved. Patients under GA cannot respond to any heating, this will increase their vulnerability and therefore risk.

Existing Precautions

Cold compress packs are available in all Imaging departments, such that they can be applied to an area.

An NHS GGC protocol has been put in place as to how a burn should be dealt with should it occur.

Precautions relating to positioning the patient correctly are particularly important when positioning patients with tattoos under GA such as to ensure skin to skin and skin to bore contact are avoided.

Depending on the clinical query and the position and size of the tattoo, it may be possible to select a local Transmit / Receive coil which would ensure the tattooed area is not exposed to the RF and therefore heating.

Describe how they might fail to prevent adverse outcomes.

Local T/R coils may not be available or appropriate for the requested examination.

The patient under GA can clearly not respond to any heating. This would likely increase the severity of the outcome

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

Likelihood	Impact/Consequences				
	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	<u>Low</u>	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	By Whom	Start	Action
List the actions required. If action by others is required, you must send them a copy	-	date	due date

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.

B		N	As per QPulse record
Date of last review:	As per QPulse record	Next review date:	