

THE MANAGEMENT OF HEALTH AND SAFETY AT WORK REGULATIONS (1992) HAZARD IDENTIFICATION / RISK ASSESSMENT FORM

SECTION ONE ADMINISTRATIVE DETAILS

REFERENCE: MRI Injector System	PROCESS ASSESSOR: J Fulford
DEPARTMENT: IBCS	PROCESS SUPERVISOR: J Fulford
DATE: 22/6/16	H&S CO-ORDINATOR: Jacqueline Whatmore
REMEDIAL ACTION REQUIRED? YES 🗌 NO X	ASSESSED UNDER OTHER REGULATIONS? YES 🗌 NO X
OTHER ASSESSMENT REFERENCE:	
REMEDIAL ACTION PRIORITY? HIGH	

WORK ACTIVITY: MRI contrast agent studies

BRIEF DESCRIPTION: The use of intravenously delivered Gadolinium based contrast agents within MRI studies

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ESTIMATED No OF EMPLOYEES AT RISK:

ESTIMATED No OF NON EMPLOYEES AT RISK:

200/year

SECTION TWO HAZARD IDENTIFICATION

HAZARD = something with the potential to cause harm

• Identify HAZARDS highlight and embolden KEYWORDS

HAZARDS	KEYWORDS					
Physical Confined Space Building Related Display Screen Equip't Electricity Environment Fire Handling Heat / Cold Housekeeping Machinery Movement Pressure / Vacuum Radiation (Ionising) Radiation (Non Ionising) Transport Water Weather	asphyxiant cold hot toxic irritant lone working ventilation CONDAM Regs Ass't scaffolding work at height falling object asbestos containing materials DSE Regs Ass't desk chair electricity eye strain eye test posture PAT testing live static induced arc heat burn shock 240V AC 405V AC high voltage temperature humidity light sound space flammable combustible explosion oxygen heat MHO Regs Ass't abrasive heavy lifting pushing pulling sharp hot cold awkward radiation conduction convection burn scald touch falling tripping slipping storage space cables combustion sources hygiene MHO Regs Ass't cutting rotating sliding falling entrapment breakage ejection of parts electricity radiation heat cold slip fall trip wet ice steps stairs height burst release lines joints container cylinder explosion leak blockage relief/control failure radioisotope X-ray alpha beta gamma contamination exposure use storage disposal ultra-violet infra-red laser microwave burns welding eye cataract road markings road signs dangerous loads minibus fork-lift truck trolley truck commercial vehicle passenger lift goods lift footpath ramp car boat diving drowning slipping electricity hot cold wet ice wind lone-working frost-bite heat-stroke sunburn skin cancer hypothermia					
Chemical Physical State Properties Routes of Entry Biological Type Properties Genetic Modification Psychological	solid dust liquid gas vapour fume hot cold COSHH Ass't toxic corrosive irritant carcinogen <u>allergen</u> flammable unstable explosive inhalation ingestion skin contact <u>injection</u> COSHH Ass't micro-organism bacteria virus parasites cell culture storage disposal infectious pathogenic carcinogenic mutagenic teratogenic storage disposal GMO Regs Ass't storage disposal					
Type Other Hazard(s):	fatigue stress trauma Keywords:					

SECTION THREE RISK ASSESSMENT

RISK = a combination of the likelihood a hazard will cause injury and the severity of the injury

Quantify r	isk for e	each	hazard	identified	using	the	following	table:
Quantity r	ISK TOF 6	each	nazaro	laentinea	using	the	tollowing	

Likelihood of injury	Score	Severity of injury		
	Α		В	
improbable	1	very minor injury; abrasions / contusions	1	
remote	2	minor injuries; cuts / burns	2	
possible	3	major injuries; fractures / cuts / burns / damage to internal organs	3	
probable	4	severe injury; amputation / eye loss / permanent disability	4	
likely	5	death	5	

• Enter Hazards identified in Section 1

- Enter Existing control measures
- Quantify Risk factor by multiplying Score A and Score B, taking account of existing control measures,
- If Risk factor is over 5: take Remedial Action to improve Existing control measures or abandon the task
- If Risk factor is 5 or under, the risks are under adequate control, but should be carefully monitored

Hazards	Existing Control Measures	Score A	Score B	Risk (A x B)	Remedial Action
Since 2006 it has been recognized that cases of nephrogenic systemic fibrosis (NSF) (a rare disease causing fibrosis of the skin and kidney failure) have occurred following the administration of linear gadolinium complex contrast agents to patients with advanced kidney dysfunction.	Non-linear gadolinium complex contrast agents will be used which have not been associated with NSF cases Only participants without a history of kidney impairment that are willing to consent specifically to contrast administration will be considered and these will only receive the agent after adequacy of their kidney function [Glomerular filtration rate (GFR)>60ml/min/1.73m ²] has been confirmed by analysis of a small blood sample (<10ml) which will be obtained at a prior visit.	1	3	3	
Rare side effects of contrast agent injection may include a mild transient headache or nausea. Rarely (less than 1% of the time), low blood pressure and light-headedness can occur. Very rarely (less than one in a thousand), patients are allergic to the contrast agent.	Participants with known gadolinium allergies will be excluded from the study. If a participant feels any adverse effects they will be removed from the MRI scanner and all necessary action for their relief and recovery will be taken immediately. Nurse and doctor cover will be in place at all time with access to a crash trolley including a full anaphylactic shock kit.	1	3	3	