

Science Practical Risk Assessment

School of Maths & Science	Practical Activity Title	Gram staining of bacterial smears (MAS_SP_0015_Gram_staining)		Risk Assessment No. MAS_RA_0015_Gram_staining	
Location	Biology Lab. NB124			Revision level: 1	
Assessment Performed By	Phil Jones	Signature:		Date:	12 Nov 2009
Supported By	Gareth John	Signature:		Date:	12 Nov 2009
Approved By	Kelly Gay (H.o.S.)	Signature:		Date:	12 Nov 2009
Date of Re-assessment (if necessary)	Re-assess if any changes to procedure or equipment / chemicals are made.				

HAZARDS TO BE CONSIDERED	WHO MIGHT BE HARMED?	IS THE RISK ADEQUATELY CONTROLLED?	WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?
1. Slipping / Tripping	Staff		
2. Fire	Students		
3. Chemicals / drugs			
4. Moving parts of machinery			
5. Pressure systems		<i>Please complete overleaf</i>	<i>Please complete overleaf</i>
6. Electricity			
7. Dust			
8. Fumes			
9. Manual Handling			
10. Noise			
11. Lighting			
12. Computers			
13. Any other hazards			

(Please refer to Risk Assessment Matrix to indicate how Severity and Likelihood combine to produce a Risk score)
Likelihood x Severity = Risk Score, = Low, Medium or High risk

Type & Source Of Hazard	Nature Of The Risk	Type Of Activity In Which Risks May Arise	Control Measures	Risk Rating			L M H	Any Further Control Measures Required
				L	S	R		
Ammonium Oxalate /crystal violet	Flammable Harmful Inhalation Ingestion Skin Absorption	Staining bacterial smear	Wear goggles, labcoat and gloves during staining procedure	1	1	1	L	
Lugol's Iodine	Harmful Irritant Inhalation Skin Absorption Sensitization	Staining bacterial smear	Wear goggles, labcoat and gloves during staining procedure	1	1	1	L	
Proponone	Flammable Harmful Irritant Inhalation Sensitization	Staining bacterial smear	Wear goggles, labcoat and gloves during staining procedure ALL Bunsen burners are extinguished after heat fixing and before proceeding with staining	1	1	1	L	
Carbol Fuchsin/ Safranin	Flammable Toxic Harmful Carcinogenic	Staining bacterial smear	Wear goggles, labcoat and gloves during staining procedure	1	1	1	L	
Bags & Coats	Trip Hazard	Any activity which involves movement around the laboratory	Place all bags & coats etc in lockers provided	1	1	1	L	

Type & Source Of Hazard	Nature Of The Risk	Type Of Activity In Which Risks May Arise	Control Measures	Risk Rating			L M H	Any Further Control Measures Required
				L	S	R		
<i>Escherichia coli</i>	Environmental contamination	A safe strain used for many years in education From Phillip Harris.	Benches are wiped down with dilute bleach sol'n following the prac. In case of contact with skin wash with soap and water.	1	1	1	L	
<i>Bacillus subtilis</i>	Environmental contamination	A safe strain used for many years in education From Phillip Harris.	Benches are wiped down with dilute bleach sol'n following the prac. In case of contact with skin wash with soap and water.	1	1	1	L	
Bunsen burner	Burns	Heat fixing bacterial smear	All long hair should be tied back	1	2	2	L	
Propanone	Flammable Fire/explosion	Heat fixing bacterial smear	ALL Bunsen burners are extinguished after heat fixing and before proceeding with staining	1	3	3	L	
Light microscopes	(see risk assessment MS RA 0001 light microscopy)	(see risk assessment MS RA 0001 light microscopy)	(see risk assessment MS RA)001 light microscopy)					

INDICATE WHAT FIRST AID ARRANGEMENTS ARE IN PLACE

A science technician (qualified first aid at work) shall be present during all science practical lessons.
First aid kit available in all science prep rooms (Physics NB232, Chemistry NB237B & Biology NB124A).

Assessment performed by : (Please Print Name)	Phil Jones	Position :	Biology Lecturer
Date of Assessment :	12th November 2009		
Signed :			

ACTION LIST RECOMMENDATIONS	Risk Rating			L M H	TO BE ACTIONED BY	DATE ACTION COMPLETED	SIGNATURE
	L	S	R				