

Record of General Assessment of Significant Risks

Sheet 1 of 3

Operational Activity: Risk assessment for DNA Electrophoresis				Date of Assessment: 29/09/2025 On this date the performance assessment for this activity, based on the further action required was:			
Site: RBG Kew Wakehurst		Department: Programmes and Learning	Unit: Learning Programme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Assessor/s: Hayley Young Lead Teacher		Signed off by: Julie Whelan Learning Manager		Black	Red	Amber	Green X
Item	Sub-activity	Risk rank (H,M,L)	People especially at risk* Students and their carers	Further action required	Person responsible	Action taken	
	Hazard		Existing controls				
1	Gloves need to be worn for this practical therefore risk of latex allergy. Latex gloves which may cause allergic reaction.	L	Offer non latex gloves.	None	Wakehurst Teacher		
2	Exposure to chemicals Use of restriction enzyme in DNA solution, which is a mild irritant.	L	Minute quantities used. Gloves, goggles and lab coats worn	None	Wakehurst Teacher		
2a	Loading dye bromophenol blue is a corrosive liquid.	L	Minute quantities used. Gloves, goggles and lab coats worn.	None	Wakehurst Teacher		
2b	TAE buffer solution is an irritant.	L	Wakehurst teacher loads electrophoresis tank.	None	Wakehurst Teacher		
2c	Fast Blast and Toluidine are skin irritants and harmful if inhaled	L	Only handled by WP teacher wearing gloves and lab coats.	None	Wakehurst Teacher		

3	Exposure to electrical equipment Electrical -tank voltage 70 to 200V	L	Sealed tank, no access to anyone when operating.	None	Wakehurst Teacher
---	--	---	--	------	----------------------

Form Issue No: Trial draft

*such as employees, public, contractors, young persons, pregnant women.

Date: Next review October 2026

Black: Little or no provision for risk control.
Amber: A reasonable standard of control but some remaining issues require action.

Red: Risk control incomplete or implementation unsatisfactory.
Green: Risks minimised and a good standard of control achieved.

RISK RANKING MATRIX

Purpose: allocating action priorities for significant risks

Foreseeable consequences		Chance of exposure occurring					
Ill Health	Injury	Frequent	Probable	Occasional	Remote	Improbable	Incredible
Multiple fatalities	Multiple fatalities	H	H	H	M	L	
Single fatality	Single fatality	H	H	M	L		
Chronic or acute ill health	Major injury or permanent disability	H	M	L	No action required risk is insignificant or "tolerable"		
Minor health effects	Minor injury	M	L				
No known health effect	No injury						

Category definitions: * chance of exposure

*Chance = probability

Category	Definition
Frequent	The exposure occurs frequently during the normal course of the activity or process.
Probable	The exposure will occur several times during the activity or process.
Occasional	The exposure will occur occasionally during the activity or process.
Remote	There is a remote chance that the exposure will occur during the activity or process.
Improbable	The exposure is unlikely to occur. It will only occur exceptionally during the activity or process.
Incredible	The exposure is extremely unlikely to occur. It can be assumed that it may not occur.

Action Priorities for Significant Risks

H = High
M = Medium
L = Low