

DNA Fingerprinting: Risk Assessment

Activity	Hazard	Precaution	Risk
Micropipetting practice, restriction enzyme digest and gel loading	<ul style="list-style-type: none"> Waste tips 	<ul style="list-style-type: none"> All tips disposed of in waste pots Demonstrator to empty pots at end of session 	Very low
	<ul style="list-style-type: none"> Virkon disinfectant for waste tips: Irritant 	<ul style="list-style-type: none"> Use diluted Pre-dispensed into waste pots, placed on centre of benches Students warned not to move waste pots or touch liquid 	Low
	<ul style="list-style-type: none"> TBE Running Buffer: Irritant 	<ul style="list-style-type: none"> Used at low concentration Spills wiped up immediately Students to wash hands if spilled 	Very low
Agarose gels	<ul style="list-style-type: none"> Burns from molten agarose when pouring gels 	<ul style="list-style-type: none"> Students shown how to pour agarose safely Students to use rubber hand protectors to hold hot flask Activity closely supervised 	Low
	<ul style="list-style-type: none"> SYBR-Safe® DNA stain in agarose gel: Potentially harmful 	<ul style="list-style-type: none"> Technician to prepare agarose and handle concentrated stain solution Students to wear gloves when removing combs and tape from gels Students told to avoid touching gels Gels and gloves disposed of in chemical waste 	Very low
Gel running	<ul style="list-style-type: none"> Electrical hazard from gel tanks and power packs 	<ul style="list-style-type: none"> Demonstrator to check lids on gel tanks and leads plugged in correctly before turning on power and starting gels Demonstrator to switch off and unplug power packs at end of gel run 	Very low
Visualisation of DNA	<ul style="list-style-type: none"> Blue light transilluminator: Risk of eye damage in individuals with macular degeneration 	<ul style="list-style-type: none"> All participants to wear orange safety glasses provided when viewing gels 	Very low