



General Risk Assessment

Form RA1

(Refer to Notes for Guidance before completing this form)

School Assessment No:	R(D)SVS/The Roslin Institute
Title of Activity:	See DNA (RI/GG/02)
Location(s), Date and Time of Work:	
Brief Description of Work: See DNA is an activity for the general public or school pupils. Participants will extract DNA from strawberries (or a substitute fruit) using a mixture of washing up liquid and salt. DNA will be precipitated using ethanol.	

Hazard Identification:

Hazard(s)	Present Risk Evaluation L/M/H	Control Measures (i.e. alternative work methods / mechanical aids / engineering controls etc.)	Risk Evaluation after control L/M/H
Pasteur pipettes could cause eye injuries	L	Participants will be instructed in the proper use of Pasteur pipettes to accurately measure liquids.	L
Sandwich bags potential choking hazard	L	Participants will be supervised at all times during the activity.	L
Ethanol can cause irritation to skin and eyes and is toxic if ingested.	M	Participants will receive a verbal safety warning before using ethanol. Aliquots of required volumes of ethanol are prepared beforehand, to minimise the risk of splashes and spillages when pouring. Participants will be supervised at all times while using	L

		<p>ethanol and will only handle these small volumes.</p> <p>Absorbent towels will be available to handle any spillages which occur.</p> <p>Participants will wear nitrile gloves, lab coats and safety glasses while handling ethanol.</p> <p>Strawberry mixture containing ethanol will be bulked in a winchester bottle, brought back to campus, and disposed of appropriately.</p>	
Ethanol is flammable	M	<p>Ethanol in small aliquots will be clearly labelled as flammable and transported in a metal fire-proof container.</p> <p>Ethanol will be kept away from naked flames and stored/transported in cool conditions.</p> <p>Absorbent towels will be available to handle any spillages which occur.</p>	L
Strawberries are a potential allergen	H	<p>Strawberries are only handled and not eaten during this activity.</p> <p>Participants will be asked to identify whether they have a strawberry allergy before starting the activity. Banana or kiwi fruit will be substituted in these cases. Those with allergies will not handle any equipment which has come into contact with strawberries.</p>	L

Engineering Controls:

Guarding		Extraction (LEV)		Interlocks		Enclosure	
Other relevant information (incl. testing frequency if appropriate):							

Personal Protective Equipment (PPE):

Eye / Face	X	Hand /Arm	X	Feet / Legs		Respiratory	
Body (clothing)		Hearing		Other (Specify)			
Specify the grade(s) of PPE to be worn: Nitrile gloves and safety glasses							
Specify when during the activity the item(s) of PPE must be worn: During ethanol handling							

Non-disposable items of PPE must be inspected regularly and records retained for inspection

Persons at Risk:

Academic staff	x	Technical staff	x	P'Grad students	x	U'Grad students	
Maintenance staff		Office staff	x	Cleaning staff		Emergency personnel	
Contractors		Visitors	x	Others			

Additional Information: Identify any additional information relevant to the activity, including supervision, training requirements, special emergency procedures, requirement for health surveillance etc.

All staff and students will receive training, including H&S aspects, before running the activities for the public.
Children taking part in the activities will be accompanied by a responsible adult at all times.

Assessment carried out by:

Name:		Date:	
Signature:		Review Date:	