

Risk Assessment for School Science Activities

Name and nature of activity	Performing a sheep brain dissection	
Location and date of activity		
Name of teacher/technician	Science ASSIST example risk assessment	
Activity type	<input checked="" type="checkbox"/> Technician procedure <input checked="" type="checkbox"/> Teacher demonstration <input checked="" type="checkbox"/> Student activity – Student year group	
Physics and general equipment	Type of hazard	Controls and other measures
PPE (lab coat/apron, gloves and safety glasses) Dissecting board Dissecting instruments: Forceps, Probe, Scalpel, Scissors Paper towel Newspaper	<input type="checkbox"/> Radiation ionising laser <input type="checkbox"/> Electrical <input type="checkbox"/> Thermal <input type="checkbox"/> Projectiles <input checked="" type="checkbox"/> Sharps <input type="checkbox"/> Other –	<input checked="" type="checkbox"/> Relevant signage <input type="checkbox"/> Perspex safety shield <input checked="" type="checkbox"/> Sharps container <input type="checkbox"/> Glassware free from cracks or chips <input checked="" type="checkbox"/> Safety glasses <input type="checkbox"/> Thermally insulated gloves <input checked="" type="checkbox"/> Other – Only staff attach/remove scalpel blades using safe procedures or use disposable scalpel blades.
Chemicals used and produced	Type of hazard	Controls and other measures
Disinfectant – hospital grade, diluted according to manufacturer's instructions (Corrosive) 70% v/v ethanol (flammable) [Note: include chemical preservative here if using a preserved specimen]	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Explosive <input checked="" type="checkbox"/> Flammable <input type="checkbox"/> Oxidising <input type="checkbox"/> Gases under pressure <input checked="" type="checkbox"/> Corrosive </div> <div style="width: 45%;"> <input type="checkbox"/> Acute toxicity <input checked="" type="checkbox"/> Health hazards <input type="checkbox"/> Chronic health hazards <input type="checkbox"/> Environmental <input type="checkbox"/> Other – </div> </div>	<input checked="" type="checkbox"/> Limit quantity/concentration <input type="checkbox"/> Perspex safety shield <input checked="" type="checkbox"/> Ventilation: natural/exhaust <input type="checkbox"/> Fume cupboard <input checked="" type="checkbox"/> Safety glasses <input checked="" type="checkbox"/> Laboratory coat/apron <input checked="" type="checkbox"/> Gloves: latex/nitrile/neoprene/PVC <input checked="" type="checkbox"/> Safety shower <input type="checkbox"/> Other –
Biological/geological materials	Type of hazard	Controls and other measures
Freshly frozen sheep brain	<input checked="" type="checkbox"/> Biohazard <input type="checkbox"/> Dust/aerosols <input checked="" type="checkbox"/> Sharps <input type="checkbox"/> Manual handling <input type="checkbox"/> Other –	<input type="checkbox"/> Steriliser <input checked="" type="checkbox"/> Disinfectant <input checked="" type="checkbox"/> Sharps container <input type="checkbox"/> Dust mask <input checked="" type="checkbox"/> Safety glasses <input checked="" type="checkbox"/> Gloves <input type="checkbox"/> Other –
Waste produced	Waste disposal procedure	
Dissected animal tissue (brain) (bin) Used disinfectants (sink) Used or damaged scalpel blades (sharps container)	<input type="checkbox"/> Pre-treatment of waste – All parts of the brain must be wrapped in newspaper and placed in a dedicated garbage bag. When waste is collected double bag for disposal in industrial bin. <input checked="" type="checkbox"/> Sink with water – Used disinfectants <input checked="" type="checkbox"/> Regular waste – Dissected animal tissue (brain) <input type="checkbox"/> Licenced hazardous waste company – <input checked="" type="checkbox"/> Other – Used/damaged scalpel blades must be placed in an approved sharps container after use.	
Standard Operating Procedures		
<input checked="" type="checkbox"/> I have read the relevant Standard Operating Procedure. <input checked="" type="checkbox"/> I am experienced/trained in using all the equipment listed. <input checked="" type="checkbox"/> All chemicals used and produced are approved for use. <input checked="" type="checkbox"/> I have read the current SDSs for all hazardous chemicals used and produced. <input checked="" type="checkbox"/> I am aware of safety guidelines for using all chemicals, materials and equipment. <input checked="" type="checkbox"/> I will follow local guidelines for waste disposal (water authority, local council, EPA). <input checked="" type="checkbox"/> I am aware of first aid procedures if required.		
Other comments: Note that fainting may occur during this type of activity, so be familiar with first aid information. Sheep brains should be sourced disease (or infection) free from ethical and licenced suppliers. Store below 5°C prior to dissection. Use dissection scissors, instead of scalpels for students whenever possible.		
Conclusion:		
<input type="checkbox"/> Risks not significant now and not likely to increase. <input checked="" type="checkbox"/> Risks significant but effectively controlled at the moment. <input type="checkbox"/> Risks significant and not adequately controlled at the moment. <input type="checkbox"/> Uncertain about risks; more detailed assessment required.		
Assessment carried out by: Science ASSIST	Signature:	Date: Dec 2017
Assessment approved by:	Signature:	Date:
Next assessment due:		
This Risk Assessment assumes that the activity will be conducted in a science teaching area with the following facilities: electricity, running water, emergency shut-offs for electricity, gas if applicable, and water, regular testing and tagging of portable appliances; emergency contingencies such as evacuation/emergency plans, appropriate fire extinguishers, spill kits, hand washing facilities, eyewash/safety shower and first aid supplies. It is also assumed that all the necessary licencing requirements and approvals are obtained prior to the activity.		