

Risk Assessment for School Science Activities

Name and nature of activity	Performing a lung 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, safety glasses and gloves) Dissecting board Dissecting instruments: Forceps, Probe, Scissors, Scalpel (optional) Glassware, tubing and string Pump or syringe Large, transparent, plastic bag 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 checked="" 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)	<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 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	
Fresh sheep, cow or pig heart-lung set (pluck)	<input checked="" type="checkbox"/> Biohazard <input checked="" 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 checked="" type="checkbox"/> Other – Use plastic bag when inflating lungs	
Waste produced	Waste disposal procedure		
Dissected animal tissue lung (pluck)(bin) Used disinfectants (sink) Used or damaged scalpel blades	<input checked="" type="checkbox"/> Pre-treatment of waste – All parts of the lung 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 (lungs) <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. Offal that has passed a health inspection by a health inspector or procured from a butchers shop, abattoir or biological supplier is suitable for dissection. 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: Sept 2016	
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.			