

# Risk Assessment for School Science Activities

<b>Name and nature of activity</b>	Performing a heart dissection	
<b>Location and date of activity</b>		
<b>Name of teacher/technician</b>	Science ASSIST example risk assessment	
<b>Activity type</b>	<input checked="" type="checkbox"/> Technician procedure <input checked="" type="checkbox"/> Teacher demonstration <input checked="" type="checkbox"/> Student activity – Student year group	
<b>Physics and general equipment</b>	<b>Type of hazard</b>	<b>Controls and other measures</b>
PPE (Lab coat/apron, safety glasses and gloves) Dissecting board Dissecting instruments: Forceps, Probe, Scissors, Scalpel (optional) 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 scalpels. See extra comments below
<b>Chemicals used and produced</b>	<b>Type of hazard</b>	<b>Controls and other measures</b>
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 –
<b>Biological/geological materials</b>	<b>Type of hazard</b>	<b>Controls and other measures</b>
Fresh sheep, cow or pig heart	<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 checked="" type="checkbox"/> Other – See comments below
<b>Waste produced</b>	<b>Waste disposal procedure</b>	
Dissected animal tissue (hearts) (bin) Used disinfectants (sink) Used or damaged scalpel blades (sharps container)	<input checked="" type="checkbox"/> Pre-treatment of waste – All parts of the heart must be wrapped in newspaper and placed in a dedicated garbage bag. When waste material 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 (hearts) <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.	
<b>Standard Operating Procedures</b>		
<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.		
<b>Conclusion:</b>		
<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: <b>Sept 2016</b>
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.		