

Curriculum activity risk assessment

Maintenance and operation of a safe work area outside the laboratory

clever • skilled • creative

Activity scope

This document relates to student participation in Maintenance and Operation of a Safe Work Area Outside the Laboratory as a curriculum activity.

'Outside the laboratory' refers to science activities carried out by teachers and/or students in places other than the science laboratory. This may be a science demonstration room, standard classroom, school grounds, home or a field trip location.

Possible field trip locations include quarries, mines, cliffs, rivers and industrial sites. Each of these will carry particular hazards and associated risks.



Teachers/leaders:		
Activity description:		
Start date:	Finish date:	No of students (approx.):
Class groups:		Supervision ratio (approx.):

Risk level

The actual risk level will vary according to the specific circumstances of the activity and these **must be** considered when assessing the inherent risk level and planning the activity. As a starting point, as the following questions:

- Which students will be involved?
- Where will the students be?
- What will the students be doing?
- Who will be leading the activity?
- What will the students be using?

Activities conducted outside a laboratory will carry AT LEAST the same level of risk as those conducted normally in a laboratory. If the activity takes place in a managed field environment (such as a theme park or an environmental education centre) this may have the effect of reducing the associated level of risk, when compared to other locations outside the laboratory.

Inherent risk level		Action required/approval
<input type="checkbox"/>	<p>Low</p> <p>Activities that do not involve heat, pressure or vacuums, fumes, acids or other corrosive materials, highly volatile and/or flammable chemicals, mains-voltage power sources, dangerous biological materials, animals presenting more than a minimal risk to health or safety, or mechanical and/or moving devices or objects</p> <p>Difficult terrain for field trips</p>	<input checked="" type="checkbox"/> Manage through regular planning processes
<input type="checkbox"/>	<p>Medium</p> <p>Activities which involve heat, pressure or vacuums, fumes, acids or other corrosive materials, volatile and/or flammable chemicals, mains-voltage power sources, biological materials, animals presenting some risk to safety, and low-speed mechanical and/or moving devices or objects</p> <p>Field trip areas where some potential hazards exist (e.g. broken glass, uneven surfaces, exposed deep water, extremes of temperature etc.)</p>	<input checked="" type="checkbox"/> Record controls in planning documents and/or complete this <i>Curriculum Activity Risk Assessment</i> . <input checked="" type="checkbox"/> Consider obtaining parental permission.
<input type="checkbox"/>	<p>High</p> <p>Activities which involve high levels of heat or very low temperature materials (e.g. liquid oxygen or nitrogen), high pressures or low vacuums, toxic fumes, highly corrosive substances, highly volatile and/or flammable chemicals, high-voltage electricity (static and/or current), radiation emitters, dangerous biological materials, animals presenting a significant risk to safety and high-speed mechanical and/or moving devices and objects</p> <p>Field trip areas which could present severe hazards (e.g. cliffs, caves, wave platforms)</p>	<input checked="" type="checkbox"/> A <i>Curriculum Activity Risk Assessment</i> must be completed. <input checked="" type="checkbox"/> Principal or delegated Deputy Principal or Head of Program (i.e. HOD, HOSES, HOC) to review and approve risk assessment. <input checked="" type="checkbox"/> Obtaining parental permission is recommended. <input checked="" type="checkbox"/> Once approved, activity details are to be entered into the <i>School Curriculum Activity Register</i> .

Listed below are the minimum recommendations for this type of activity. For any items checked "No", provide further information on additional or alternate controls to be implemented for the safe conduct of the activity.

Minimum supervision	
<p>Adequate adult supervision is to be provided. In determining what is adequate, consider the number of students, their individual needs, and the nature of the activity. If an adult other than a registered teacher is engaged for instruction, a teacher is to be present to take overall responsibility. Blue Card requirements must be adhered to.</p>	
<input type="checkbox"/>	Registered teacher with minimum qualifications as outlined below
OR	
<input type="checkbox"/>	An adult with minimum qualifications as outlined below, in the presence of a registered teacher
Further information:	

Minimum qualifications

The qualifications listed in this section are minimums for each type of situation. Leaders are encouraged to seek training to raise their qualification level above the minimum listed.

Current first aid qualifications including Cardio Pulmonary Resuscitation (CPR) or ready access to first aid facilities, including qualified personnel.

[Blue Card](#) requirements met

Low - Activities that do not involve heat, pressure or vacuums, fumes, acids or other corrosive materials, highly volatile and/or flammable chemicals, mains-voltage power sources, dangerous biological materials, animals presenting more than a minimal risk to health or safety, or mechanical and/or moving devices or objects

Difficult terrain for field trips

For a registered teacher:

Knowledge of the activity and its potential hazards

For a leader other than a registered teacher, if a teacher with knowledge of the activity is not available:

Knowledge of the activity and its potential hazards

Medium - Activities which involve heat, pressure or vacuums, fumes, acids or other corrosive materials, volatile and/or flammable chemicals, mains-voltage power sources, biological materials, animals presenting some risk to safety, and low-speed mechanical and/or moving devices or objects

Field trip areas where some potential hazards exist (e.g. broken glass, uneven surfaces, exposed deep water, extremes of temperature etc.)

High - Activities which involve high levels of heat or very low temperature materials (e.g. liquid oxygen or nitrogen), high pressures or low vacuums, toxic fumes, highly corrosive substances, highly volatile and/or flammable chemicals, high-voltage electricity (static and/or current), radiation emitters, dangerous biological materials, animals presenting a significant risk to safety and high-speed mechanical and/or moving devices and objects

Field trip areas which could present severe hazards (e.g. cliffs, caves, wave platforms)

For a registered teacher with qualifications in Science or a leader other than a registered teacher with appropriate qualifications:

Competence to conduct the activity

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
- experience (i.e. previous involvement) in undertaking the activity
- demonstrated ability and/or expertise to undertake the activity
- possession of qualifications related to the activity.

Further information:

Minimum equipment/facilities <i>If 'No' is ticked, provide further information.</i>	Yes	No
First aid kit suitable for activity	<input type="checkbox"/>	<input type="checkbox"/>
Communication system: <input type="checkbox"/> phone-line at location <input type="checkbox"/> mobile phone <input type="checkbox"/> walkie talkies/UHF radio <input type="checkbox"/> student/adult messenger Other:		
Sun safety equipment (hat, sunscreen, shirt etc)	<input type="checkbox"/>	<input type="checkbox"/>
Drinking water (students should not share drinking containers)	<input type="checkbox"/>	<input type="checkbox"/>
Protective equipment appropriate for the particular activity, such as safety glasses and laboratory coats or aprons, should be worn by all persons involved in the activity.	<input type="checkbox"/>	<input type="checkbox"/>
Further information:		

Hazards and suggested control measures

All persons engaging in this activity should:

- identify the hazards, including any additional hazards not mentioned here
- assess their significance
- manage the potential risks.

Listed below are indicative hazards/risks and suggested control measures. They are by no means exhaustive lists. After checking these, add details of any other identified hazards/risks and additional controls you intend to implement.

Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
Biological Material <ul style="list-style-type: none"> • Body Fluids (e.g., blood, saliva, sweat) 	<ul style="list-style-type: none"> • Comply with Infection Control Guideline. Students with open cuts and abrasions are to be removed from the activity and treated immediately. If bleeding cannot be controlled completely, the participant should not be allowed to return to the activity. All clothing, equipment and surfaces contaminated by blood should be regarded as potentially infectious. 	<input type="checkbox"/>	<input type="checkbox"/>	

Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
	<ul style="list-style-type: none"> • Ensure that students do not share personal equipment such as drink bottles. • Have sufficient and suitable containment material (bandages etc.) readily available. • Ensure that all biological materials are treated as contaminated and potentially hazardous. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Environmental conditions <ul style="list-style-type: none"> • Temperature • Weather • Surfaces • Surrounds 	<ul style="list-style-type: none"> • In addition to the hazard reduction techniques appropriate to the activity in other settings, the teacher should verify conditions of field trip venues before arranging excursions. • Assess weather conditions before and during activity (e.g. temperature, storms) • When science activities occur where additional hazards exist such as furniture arrangement, traffic, waves, falling branches, uneven ground, waterholes, cliffs, caves, getting lost or the presence of ticks, snakes or bees, processes should be put into place to supervise, monitor and control the movement of students appropriately. • Where a location other than a laboratory lacks essential safety features, medium and high risk activities can proceed only if alternative safety measures are taken (e.g. if naked flame is to be used in the activity a sand bucket or fire blanket should be available). 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Students <ul style="list-style-type: none"> • Special needs • Medical conditions • Student Numbers • High risk behaviours 	<ul style="list-style-type: none"> • Obtain parental permission, including relevant medical information. • When students with medical conditions are involved, ensure that relevant medical/emergency plans and medications are readily available (insulin, Ventolin, Epipen, etc.) 	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	

Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
	<ul style="list-style-type: none"> • Refer to Individual education plan/Educational adjustment plan/Behaviour management plan and other student documents. • Where necessary, obtain advice from relevant advisory visiting teachers or specialist teachers • Ensure there is adequate adult supervision. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Tools, plant or equipment	<ul style="list-style-type: none"> • Ensure that all persons involved in the activity wear appropriate protective clothing. This includes enclosed footwear, hats or hard hats, gloves, long sleeved shirts etc. • Ensure that suitable safety and first aid equipment is available. • Ensure that processes have been put in place to minimise risks associated with the equipment to be used and to enable an effective response in case of accidents. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

Additional control measures

These would relate to the specific student needs, location and conditions in which you are conducting your activity.

Hazards/risks	Control measures

Submitted by:	Date:
List the names of those who were involved in the preparation of this risk assessment.	

Approval	
<input type="checkbox"/>	Approved as submitted
<input type="checkbox"/>	Approved with the following condition(s):
<input type="checkbox"/>	Not approved for the following reason(s):
By:	Designation:
Signed:	Date:
Once approved, activity details should be entered into the <i>School Curriculum Activity Register</i> by administrative staff.	Reference no.

Monitor and review <i>To be completed during and/or after the activity and/or at the completion of the series of activities.</i>	Yes	No
Are the control measures still effective?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any changes?	<input type="checkbox"/>	<input type="checkbox"/>
Are further actions required?	<input type="checkbox"/>	<input type="checkbox"/>
Details:		

Important links

- HLS-PR-003: First Aid
<http://education.qld.gov.au/strategic/eppr/health/hlspr003/>
- HLS-PR-004: Infection Control and Management of Prescribed Contagious Conditions
<http://education.qld.gov.au/strategic/eppr/health/hlspr004/>
- Infection Control Guideline
http://education.qld.gov.au/health/pdfs/healthsafety/infection_control_guideline.pdf
- HLS-PR-005: Health and Safety Incident Recording and Notification
<http://education.qld.gov.au/strategic/eppr/health/hlspr005/>
- SCM-PR-002: School Excursions
<http://education.qld.gov.au/strategic/eppr/schools/scmpr002/>
- SCM-PR-011: Animal Ethics and Welfare in Schools
<http://education.qld.gov.au/strategic/eppr/schools/scmpr011/>
- HLS-PR-013: Developing a Sun Safety Strategy
<http://education.qld.gov.au/strategic/eppr/health/hlspr013/>
- HRM-PR-010: Working with Children Check – Blue Cards
<http://education.qld.gov.au/strategic/eppr/hr/hrmpr010/>
- HLS-PR-006: Managing Occupational Risks with Chemicals
<http://education.qld.gov.au/strategic/eppr/health/hlspr006/hs16.pdf>
- Safe Operation of Laboratory Equipment
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/safelabequip.pdf>
- Handling Live Animals in a School Setting
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resouces/liveanimals.pdf>
- Biological Activities
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/biolactivities.pdf>
- Chemical Hazards
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/chemhazards.pdf>
- Management and Storage of Hazardous Science Substances
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/hazsciencematerials.pdf>
- Maintaining and Operation of a Safe Laboratory
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/safelab.pdf>
- Safe Work Practices Conducting Science Experiment Activities
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/scienceexperiment.pdf>
- Aspects of Science Management: A Reference Manual for Schools
<http://education.qld.gov.au/health/pdfs/healthsafety/aspects-science-mgmt.pdf>
- Creating Healthier Workplaces
<http://education.qld.gov.au/health/index.html>

Further information

For further information on incorporating risk management strategies into curriculum activity planning refer to [HLS-PR-012 Managing Risks in Curriculum Activities](#) and the associated list of [Curriculum Activity Risk Assessment Guidelines](#).

For further support with risk management training and advice, contact trained staff in schools such as Workplace Health and Safety Officers (WHSOs) and Workplace Health and Safety Representatives (WHSRs), and regional staff such as Senior Health and Safety Consultants.