

Curriculum activity risk assessment: Maintenance and Operation of a Safe Laboratory

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Activity scope

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

A laboratory for the purposes of this document refers to a specialist area set aside for the preparation and operation of scientific experimental procedures associated with learning.

Other areas, including science demonstration rooms, primary school activity areas, science trolleys and sites used for field excursions and industry visits that may be the site for science learning activities are covered in [Maintenance and Operation of a Safe Work Area Outside the Laboratory](#).



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, ask 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?

Inherent risk level		Action required / approval
<input type="checkbox"/>	Low Activities which do not involve heat, pressure or vacuums, acids or other corrosive materials, highly volatile and/or flammable chemicals, mains voltage power sources, dangerous biological materials or animals	<input checked="" type="checkbox"/> Manage through regular planning processes.
<input type="checkbox"/>	Medium Activities which involve heat, pressure or vacuums, fumes, acids or other corrosive materials, highly volatile and/or flammable chemicals, mains voltage power sources, biological materials, and low-speed mechanical and/or moving devices or objects	<input checked="" type="checkbox"/> Record controls in your planning documents and/or complete this <i>Curriculum Activity Risk Assessment</i> . <input checked="" type="checkbox"/> Consider obtaining parental permission.
<input type="checkbox"/>	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 and high-speed mechanical and/or moving devices and objects	<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 ticked 'No', provide further information regarding the additional or alternate controls to be implemented for the safe conduct of the activity.

Minimum supervision

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.

Registered teacher with minimum qualifications as outlined below

OR

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 which do not involve heat, pressure or vacuums, acids or other corrosive materials, highly volatile and/or flammable chemicals, mains-voltage power sources, dangerous biological materials or animals

For a registered teacher:

knowledge of the activity and its potential hazards

A teacher could demonstrate their competency to conduct an activity to the person approving the Curriculum Activity Risk Assessment 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.

For a leader other than a registered teacher:

knowledge of the activity and its potential hazards, if a teacher with knowledge of the activity is not available .

Medium — Activities which involve heat, pressure or vacuums, fumes, acids or other corrosive materials, highly volatile and/or flammable chemicals, mains voltage power sources, biological materials, and low-speed mechanical and/or moving devices or objects

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 and high-speed mechanical and/or moving devices and objects

For a registered teacher:

experience (previous involvement) in the activity

A teacher could demonstrate their competency to conduct an activity to the person approving the Curriculum Activity Risk Assessment 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.

For a leader other than a registered teacher:

experience (previous involvement) in the activity, if a teacher with the relevant experience is not available

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:		

Governing bodies/associations	Yes	No
See Science Teachers Association of Queensland . Has this been referred to during the planning and performance of this activity?	<input type="checkbox"/>	<input type="checkbox"/>
Safety considerations are required for this activity, have you referred to the Occupational health and safety consultant in your region?	<input type="checkbox"/>	<input type="checkbox"/>
Further information:		

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

- SCM-PR-002: School Excursions
<http://education.qld.gov.au/strategic/epr/schools/scmpr002/>
- HLS-PR-003: First Aid
<http://education.qld.gov.au/strategic/epr/health/hlspr003/>
- HLS-PR-004: Infection Control and Management of Prescribed Contagious Conditions
<http://education.qld.gov.au/strategic/epr/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/epr/health/hlspr005/>
- HRM-PR-010: Working with Children Check – Blue Cards
<http://education.qld.gov.au/strategic/epr/hr/hrmpr010/>
- HLS-PR-006: Managing Occupational Risks with Chemicals
<http://education.qld.gov.au/strategic/epr/health/hlspr006/hs16.pdf>
- Safe Operation of Laboratory Equipment
<http://education.qld.gov.au/strategic/epr/health/hlspr012/resources/safelabequip.pdf>
- Handling of Live Animals
<http://education.qld.gov.au/strategic/epr/health/hlspr012/resources/liveanimals.pdf>

- Biological Activities – Science
<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>
- Maintenance and Operation of a Safe Work Area Outside the Laboratory
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/safework.pdf>
- Safe Work Practices Conducting Science Experiment Activities
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/scienceexperiment.pdf>
- SCM-PR-011: Animal Ethics and Welfare in Schools
<http://education.qld.gov.au/strategic/eppr/schools/scmpr011/>

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](#). (See: <http://education.qld.gov.au/strategic/eppr/health/hlspr012/index1.html>)

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.