

Maintenance and operation of a safe work area outside the laboratory



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 bushland, quarries, mines, cliffs, rivers and industrial sites. Each of these will carry particular hazards and associated risks.



Special considerations

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.

Minimum activity-specific qualifications

For Low risk

- Knowledge of the activity and its potential hazards.

For Medium and High risk

- For a registered teacher with qualifications in Science or a leader other than a registered teacher with appropriate qualifications: Competence to conduct the activity.

Minimum activity-specific equipment/facilities

- Protective equipment appropriate for the particular activity, such as safety glasses, gloves and laboratory coats or aprons.
- Appropriate protective clothing (e.g. enclosed footwear, hats or hard hats, gloves, long-sleeved shirts, etc).
- Suitable safety and first aid equipment (e.g. fire blankets, ice-packs) as appropriate.

Activity-specific hazards/risks and suggested control measures

- 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.
- 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).
- 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.
- Ensure procedures for *Handling Live Animals* are adhered to, where relevant.
- Ensure that all biological materials are treated as contaminated and potentially hazardous.

Useful activity-specific links

- Animal use in Queensland State Schools
<http://ppr.det.qld.gov.au/education/management/Pages/Animal-Use-in-Queensland-State-Schools.aspx>
- *Biological Activities* – Curriculum Activity Risk Assessment Guideline
- *Chemical Hazards* – Curriculum Activity Risk Assessment Guideline
- Chemical Hazards Guidance Notes
<http://education.qld.gov.au/schools/healthy/docs/guidance-notes.doc>
- Creating Healthier Workplaces
<http://education.qld.gov.au/health/index.html>
- *Handling Live Animals in a School Setting* – Curriculum Activity Risk Assessment Guideline
- *Maintenance and Operation of a Safe Laboratory* – Curriculum Activity Risk Assessment Guideline
- *Safe Operation of Laboratory Equipment* – Curriculum Activity Risk Assessment Guideline
- Safe Work Practices Conducting Science Experiment Activities
<http://education.qld.gov.au/schools/epr/health/hlspr012/resources/scienceexperiment.doc>