

4.4 Student safety and risk management

4.4.1 Liability

A teacher owes students a duty to take reasonable steps to protect them from any injury that the teacher should have reasonably foreseen ([see 4.6.1.2](#)). This requires teachers and principals not just to react to situations as they arise but to engage in appropriate risk management to reduce the risks of injury.

Principals should implement risk management processes for identifying and controlling hazards and risks ([see 6.14](#)). They should also ensure that sufficient members of staff are trained in first-aid to an appropriate level of competency to enable first aid to be given when necessary ([see 4.5.1.1](#)).

4.4.1.1 Reporting accidents

For general record keeping purposes, it is important that details of accidents at schools or on excursions be recorded on the injury management system on CASES/CASES21. Principals may also wish to obtain further information such as statements from witnesses and retain these on file, with a notation on the statements that they are to be used for the sole purpose of defending any potential or actual legal claim.

Schools are required to immediately notify the Emergency and Security Management Unit of any incident that impacts on the safety or wellbeing of staff, students or visitors. Telephone 03 9589 6266 for 24 hour service.

More information on Incident Notification can be found at:

<http://www.eduweb.vic.gov.au/hrweb/safetyhw/default.htm>

More information on Reporting Incidents can be found at:

http://www.eduweb.vic.gov.au/edulibrary/Schools/Circulars/2007/s204-2007_incidentreporting-clr.doc

4.4.1.2 Student accident insurance cover

If a student is injured at school, or during a school organised activity, the student's parent/guardian is responsible for the cost of medical treatment. This includes the cost of transport to a medical facility or to their home.

The Department of Education and Early Childhood Development will compensate them for their medical and other expenses if it is liable to do so. Liability is not automatic and will usually depend upon whether the injury is caused by the negligence (carelessness or a breach of the 'duty of care') of a Department of Education and Early Childhood Development or school council employee or volunteer. The question of liability is determined by the Department of Education and Early Childhood Development's legal advisers or the courts.

Parents may wish to obtain student accident insurance cover from a commercial insurer, depending on their health insurance arrangements and any other personal considerations. Alternatively, school councils may decide at local level to take out whole of school student accident cover.

[See Circular 354/2005 – Student Accident Insurance Arrangements](#) for further details on the availability of personal injury insurance for students.

4.4.2 School excursions

4.4.2.1 General policy

For the purposes of this policy, an excursion is defined as an activity organised by a school (except work experience) whereby students leave the school grounds for the purpose of engaging in educational activities (including camps, adventure activities and sport).

The nature and extent of excursions conducted by a school will depend on the general educational policies developed by the school council and the curriculum programs developed by staff. The Department's requirements and guidelines relating to preparation and safety must be observed in the conduct of all excursions.

Principals, who are responsible for the conduct of all excursions, must ensure that full records are maintained. If accidents or injuries occur, comprehensive reports must be completed and filed promptly (see 4.4.1.1). Principals, teachers, school councillors and others involved in school excursions, including camps and adventure activities, must anticipate the possibility of litigation following an incident or injury. They must be prepared for a detailed examination of all their actions, their planning and the curriculum role of the particular activity.

Principals must ensure that adequate pre-excursion planning and preparation, including the preparation of students, takes place.

All staff and students must wear appropriate and suitable clothing and protective apparel. Equipment must be in good condition and be suitable for each activity undertaken.

Satisfactory arrangements must be made to provide continuous instruction for the students remaining at the school during the absence of staff accompanying an excursion.

Whenever a primary school conducts an excursion that leaves the school unoccupied, the appropriate regional office should be notified. This may be done by telephone.

The Department of Education and Early Childhood Development must not be involved in any expense associated with the conduct of excursions.

4.4.2.2 Approval for excursions

Prior to the conduct of an excursion, the approval of the school council or the principal (see below) must be obtained.

In approving the excursion, consideration should include:

- the contribution of the activity to the school curriculum
- the adequacy of the planning, preparation and organisation in relation to:
 - the school policy
 - the guidelines and advice provided by the Department of Education and Early Childhood Development and in the [Safety Guidelines for Education Outdoors](#) website
 - information provided by community groups and organisations that specialise in the activity proposed
- appropriateness of the venue
- the provisions made for the safety and welfare of students and staff
- the experience and competence of staff relevant to the activities being undertaken
- the adequacy of the student supervision ([see 4.4.2.6](#))

4.4.2.2.1 School council approval

The school council is responsible for the approval of:

- overnight excursions
- camps
- interstate and international visits
- excursions requiring sea or air travel
- excursions involving weekends or vacations
- adventure activities.

4.4.2.2.2 Principal approval

The principal is responsible for the approval of all single-day excursions (other than those referred to above that must be approved by school council) and the staff involved that are employed by the Department of Education and Early Childhood Development.

4.4.2.2.3 Approval for joint excursions

Where school council approval is required, each school involved in a joint excursion must receive the approval of its own school council and complete an on-line notification to the Emergency and Security Management Unit. Where principal approval is required, the principal of each participating school must give approval.

In such circumstances, a coordinating principal or teacher, agreed to by the principals of the schools concerned, should ensure that:

- the necessary organisational arrangements are undertaken
- the venue is appropriate
- supervision is adequate and that normal procedures for the conduct of the excursion are carried out
- parents/guardians are informed that their children may be supervised by teachers and other approved adults from the other school(s) during the excursion.

4.4.2.2.4 *Selection of venue*

The selection of the venue chosen for a camp or excursion activity must be based on sound risk management principles. Camp or excursion venues should be assessed for their inherent safety and suitability as well as for the risks associated with the activities that may occur during the camp or excursion.

When choosing a camp or excursion venue, consideration should be given to the following factors:

- health, hygiene and safety
- buildings and facilities
- activity equipment and the conduct of activities
- certification and qualifications of staff
- participant supervision
- emergency and risk management plans
- fire precautions
- first aid facilities
- quality assurance and consumer protection
- references from other schools.

Overnight school camps or excursions

Venues used for overnight accommodation may include:

- residential campsites
- overnight campsites and accommodation
- campsites that are also schools (for example: Rubicon Outdoor Centre or Bogong Outdoor Education Centre)
- interstate camps or excursions
- overseas venues

Residential campsites

Schools using residential campsites in Victoria as a venue for their camp or excursion are required to use only accredited campsites. Residential camping is defined as occurring at sites that have permanent facilities such as dormitory accommodation, kitchen, showers, toilets and recreation options.

The Department of Education and Early Childhood Development recognises residential campsites accredited by two providers:

- the Australian Camps Association's Campsite and Outdoor Activity Provider program. A full listing of all sites accredited under this program can be found on the Australian Camps Association website: [ACA Accredited Camps](#)
- the National Accommodation, Recreation and Tourism Accreditation (NARTA) program. A full listing of all sites accredited under this program can be found on the NARTA website: [NARTA Accredited Camps](#)

In conjunction with using accredited venues, it is recommended that the teacher-in-charge or a nominee of the school council inspects any site or facility being used for the first time to ensure the camp is suitable for the school's needs. The teacher-in-charge should consult with the camp manager in order to prepare their risk management documentation.

Regardless of whether or not the site has had prior inspection it is essential that the teacher-in-charge checks the camp on arrival to assess apparent dangers and hazards and to prepare contingency plans accordingly.

Overnight campsites and accommodation

Where schools use other venues such as caravan parks, motels/hotels or ski lodges, they may wish to refer to the ACA or NARTA programs' accreditation criteria when undertaking their risk management assessment prior to confirming a booking.

Overseas Travel

Schools travelling overseas should use the same assessment criteria as is used for residential camping within Australia and perform a thorough risk assessment of the proposed travel location, facilities and venues.

Before travelling overseas, schools should check whether there are any travel warnings current for the proposed countries and locations to be visited. The Smartraveller website, the Australian Government's travel advisory and consular assistance service can be found at www.smartraveller.gov.au. This site also provides useful travel information and tips.

4.4.2.3 Excursion emergency management

The emergency management process in schools should extend to and incorporate all excursions. The four components of preparedness, prevention, response and recovery need to be addressed ([see 6.15.3](#)).

Emergency procedures should include the effects of an emergency on student supervision in the event of excursion staff being required to assist injured students or to go for help.

All excursion staff and, where appropriate, the students need to be familiar with the specific procedures for dealing with emergencies on each excursion. In particular, emergency procedures pertaining to campsites should be explained as soon as practicable after arrival and a trial evacuation exercise should be carried out immediately to ensure that procedures are appropriate and to familiarise staff and students with emergency evacuation protocols.

On days of extreme fire danger or total fire ban, principals may need to cancel excursions at short notice. Where excursions are not cancelled, special fire safety precautions will be required.

School councils and principals may wish to consider equipping excursion groups and buses used to transport the students with mobile telephones to be used in emergency situations.

It is recommended that where indoor accommodation facilities do not have smoke detectors, schools supply their own detectors.

4.4.2.3.1 Identity tags

It is recommended that young students, or those who because of disability may have difficulty in communicating in an emergency, should wear identity tags on excursions.

4.4.2.3.2 Notification of school activity

Relevant details about approved excursions should be provided to the Department's Emergency and Security Management Unit using the online notification form available at: (edumail password required).

www.eduweb.vic.gov.au/forms/school/sal/enteractivity.asp

This notification should be provided at least three weeks prior to the activity.

The information will be used to provide initial information to the emergency services during an emergency. Where additional information is required during an emergency, schools will be expected to provide it from the documentation prepared for the activity.

The Emergency and Security Management Unit can be contacted on telephone 9589 6266 if further information is required.

4.4.2.3.3 Notification of overseas travel

In addition to the notification required in [4.4.2.3.2](#) schools should register their overseas travel plans with the [Department of Foreign Affairs and Trade \(DFAT\)](#). This ensures that should dangerous or exceptional circumstances arise while travelling overseas DFAT will assist in ensuring the safety and security of staff and students.

4.4.2.3.4 Communication during an emergency

In the event of an emergency, an accident or an injury to a participant, staff on the excursion should, in addition to undertaking appropriate emergency action, immediately notify the school principal. The principal should make arrangements for the Department's Emergency and Security Management Unit to be telephoned on 9589 6266. This is a twenty-four-hour service.

For excursions held outside school hours, parents/guardians should be advised of the telephone numbers (both during and outside of school hours) of the designated school contact person. While the students are on the excursion, if parents/guardians have reason to believe that an emergency may have occurred (for example, a media report) they should in the first instance contact the school contact person and not personnel on the excursion. This will ensure that the telephone lines are kept free at the excursion site.

4.4.2.3.5 First-aid

Principals and teachers have a legal duty to protect students in their charge from the risks of injury that are reasonably foreseeable. They must also assist students who may be injured or ill. As the range of

activities undertaken on excursions is extensive, principals need to ensure that excursion staff have levels of first-aid training which are appropriate to the excursion activities and location ([see 4.5.1](#)).

Teachers and other school staff who are responsible for the care of students at risk of anaphylaxis should receive training in how to recognise and respond to an anaphylactic reaction, including administering an EpiPen® ([see 4.5.15](#)).

4.4.2.4 Parental/guardian approval and information

Parents/guardians must provide written approval for their child(ren) to take part in an excursion and in any particular adventure activities that will be undertaken during the excursion.

Parental consent is required for the following reasons:

- to authorise the school to have the student in its care after normal school hours (for overnight excursions)
- to authorise the school to take the student out of the school environment (for day excursions)
- to authorise the school to consent to emergency medical treatment for the student
- to enable the parent/guardian to alert the school to any medical condition or allergies of the student
- to provide the process for the parent/guardian to consent to any financial cost of the excursion
- to provide the process for the parent/guardian to consent to the student being sent home from the excursion in the event of serious misbehaviour.

Parents/guardians asked to sign consent forms must be given sufficient information about the nature of the proposed activity and the risks involved, and the degree of supervision, to enable them to make an informed decision and to ensure the school obtains a proper consent. Students eighteen years of age and over may sign consent forms on their own behalf. Under certain circumstances, students who are under eighteen years of age and who are living separately and independently from parents/guardians may sign their own consent forms ([see 4.6.14.5](#)).

Consent forms are to remain at the school and a copy to be taken on the excursion by the teacher in charge. A list of participants and contacts in the case of an emergency should be held by the designated school contact person ([see 6.15.1.8.1](#) and the [Emergency response plan proforma](#) on the [Safety Guidelines for Education Outdoors](#) website).

Informal Relative Carers

Where a student is not living with a parent/guardian but is living in an informal care arrangement, the school may accept a consent form signed by the informal relative carer if the carer provides a signed Informal Relative Carer's Statutory Declaration to the school. The informal carer may be a relative, significant friend or a person within the student's extended social network.

See the Child Safety Commissioner website at: http://www.ocsc.vic.gov.au/publications/parents_resources.htm for a copy of the statutory declaration and information booklet. Although the statutory declaration is titled for 'relative carers', it may be used by informal carers who are not relatives but who have the day to day care of the student and with whom the student is regularly residing. The statutory declaration applies for 12 months.

4.4.2.4.1 Information to parents/guardians about student accident insurance

It is recommended, particularly where an adventure activity is planned, that parents/guardians should be reminded that:

- the Department of Education and Early Childhood Development does not provide student accident cover and
- parents may wish to obtain student accident insurance cover from a commercial insurer, depending on their health insurance arrangements and any other personal considerations.

(See [4.4.1.2](#) and [Circular 354/2005 – Student Accident Insurance Arrangements](#))

4.4.2.5 Student medical information

It is essential that excursion staff have adequate and up-to-date medical information about students who are participating in each excursion. A confidential medical information form must be completed by the parent/guardian of each student in advance of each school council approved excursion ([see 4.6.14.5](#)). These forms provide the parent/guardian with the opportunity of varying any information given to the school annually for use during normal school hours.

Where a student is not living with a parent/guardian but is living in an informal care arrangement, the school may accept the form signed by the informal relative carer if the carer provides a signed Informal Relative Carer's Statutory Declaration to the school. ([See 4.6.14.5](#) and http://www.ocsc.vic.gov.au/publications/parents_resources.htm)

These forms must be taken on the excursion by the teacher-in-charge and be accessible by other excursion staff in emergency situations. A copy of the forms should be retained at the school while the excursion is being held.

A student should not be denied attendance at an excursion, including a camp or swimming program, because the parent/guardian refuses permission for a blood transfusion. Transfusions or other courses of treatment are matters for legally qualified medical practitioners. Teachers cannot be held liable for medical treatment given against the wishes of a parent/guardian.

A recommended, confidential medical information for school excursions form appears on the next page. This form is also available at:

[Confidential medical information](#)

<http://www.education.vic.gov.au/management/schooloperations/edoutdoors/forms.htm>

Parents/guardians or students may be asked to provide further information depending on the nature of the activity.

4.4.2.6 Guidelines for supervision

Subject to Department of Education and Early Childhood Development requirements and guidelines, the degree of supervision for students involved in school excursions is a local decision. Department guidelines provide the minimum requirements for staff–student ratios, staff experience and staff qualifications. In many instances, principals will implement enhanced measures to cater for the safety of students.

Sufficient excursion staff to ensure appropriate and effective supervision must be provided. In deciding what constitutes sufficient excursion staff, the principal should take into account the guidelines contained in the [Safety Guidelines for Education Outdoors](#) website as well as:

- the qualifications and previous experience of the excursion staff
- the age, maturity, physical characteristics and gender of the students
- the ability and experience of the students
- the size of the group
- the nature and location of the excursion
- the activities to be undertaken
- any other relevant factors of which they are aware.

When requesting parental approval for their child to take part in an excursion, it is essential that parents/guardians are provided with relevant details about the degree of supervision and the nature of the activity and risks involved (see [4.4.2.4](#)).

In addition to more specific Department of Education and Early Childhood Development guidelines, the following general guidelines for supervision apply:

- for the great majority of excursions, including those types of excursions for which school council approval is required, the excursion must be under the direct control of a teacher employed by the Department of Education and Early Childhood Development or the school council and at least one other excursion staff member must be present
- for some excursions where it is considered safe and appropriate, principals may approve small group excursions in the local area where the supervision is provided by one or more excursion staff who are employed by the Department of Education and Early Childhood Development or school council (for example, school services officers such as integration aides and teacher assistants)
- in a small number of instances and for secondary-aged students only, principals may determine that direct supervision is not needed for activities involving small groups or individual students. In making this decision, principals are encouraged to ensure that a risk assessment of the activity is conducted and that their decision and the reasons for allowing the activity to proceed are documented.

In such circumstances, the teacher responsible for the activity should maintain a formal record containing:

- a description of the activity, including locations
- the names and ages of students involved
- the time of leaving and returning to school

- where excursions involve overnight stays for mixed groups, excursion staff should include at least one person of each sex. In primary schools this requirement may be waived where staff of each sex are unavailable (see [4.4.1 liability](#)).

4.4.2.7 Excursion staff

In addition to teachers employed by the Department of Education and Early Childhood Development or the school council, excursion staff may include other adults on a volunteer or paid worker basis such as parents/guardians, school services officers, community members, specialist instructors, campsite staff and trainee teachers. All approved excursion staff can be included in the staff–student ratio. School students cannot be used as excursion staff.

In approving excursion staff prior to the excursion, the principal or school council must:

- be satisfied that each excursion staff member is able to provide effective supervision of the activities involved
- ensure that there are sufficient excursion staff to provide effective supervision of students (see [4.4.2.6](#)). For the great majority of excursions, including those types of excursions for which school council approval is required (see [4.4.2.2](#)), there must be sufficient teachers employed by the Department of Education and Early Childhood Development or the school council to maintain appropriate control of the excursion and of each activity. In general, teachers should comprise at least half of the excursion staff
- ensure that where specialist instructors are employed, they:
 - have the necessary skills or qualifications for the activity
 - have appropriate experience for the age and skill level of the students
 - hold appropriate public liability insurance (see [7.18.2](#))
- ensure that the names of volunteer workers are recorded for the purposes of volunteer workers insurance (see [7.18.6](#)).
- ensure that excursion staff members who will provide supervision of students and who are not registered teachers have a Working with Children check.

It is important that the specific roles and responsibilities of each staff member (teachers, instructors, campsite staff, volunteers etc) are clarified and understood by all staff and students prior to the commencement of the excursion.

For information about the consumption of alcohol on excursions see [4.6.8.4](#).

4.4.2.7.1 *Instructors*

In some instances schools may use specialist instructors to ensure that excursion activities are undertaken correctly and safely. These instructors can be included in the staff–student ratio with the approval of the principal/school council and can be either volunteers or paid.

While instructors have the technical knowledge and expertise to instruct the students, the teachers have the overall responsibility for the safety and welfare of the students, even where the teachers do not directly provide the actual instruction.

4.4.2.7.2 Campsite staff

An increasing number of commercially operated camping venues now make available employees to assist schools with their staff–student ratios.

These campsite staff can be included in the staff–student ratio with the approval of the principal and school council.

In some instances, schools may wish to include campsite staff in the staff–student ratios for specific activities that require additional staff (e.g. canoeing). In such circumstances, the campsite staff must be in attendance and undertake their designated responsibilities for the duration of the special activity.

In other instances, where campsite staff are included in the overall staff–student ratio throughout the camp program, they must be on duty and available on the same basis as other staff included in the staff–student ratio. This will usually mean being available on a twenty-four-hour basis (see [4.4.1](#) liability).

4.4.2.8 Guidelines for staff–student ratios

Staffing ratios in this reference guide provide the minimum requirements for school excursions. It is the principal’s responsibility to ensure that sufficient excursion staff are present to provide adequate supervision for students during the excursion and for each activity undertaken.

With few exceptions (see [4.4.2.6](#)) excursions must be under the direct control of a teacher employed by the Department of Education and Early Childhood Development or the school council and at least two excursion staff must be present.

Day excursions

- One excursion staff member per twenty students.
- For senior secondary students only, this ratio may be extended where, in the principal’s judgement, student safety is not compromised
- Note that if adventure activities are included in the excursion, these activities have their own supervision ratios.

Overnight excursions (not involving adventure activities)

- Base camps in residential premises or under canvas: one excursion staff member per ten students.
- Study camps (for example, Year 12 camp) in residential premises: one excursion staff member per fifteen students.
- Tours, including interstate tours: one excursion staff member per fifteen students.
- Overseas tours: one excursion staff member per ten students

- Note that if adventure activities are included in the excursion, these activities have their own supervision ratios.

Adventure activities

See the [Safety Guidelines for Education Outdoors](#) web resource, [4.4.3](#) adventure activities and [4.4.1](#) liability.

4.4.2.9 Student behaviour and discipline

Students and their parents/guardians need to be made aware that acceptable standards of behaviour will be expected during excursions.

The disciplinary measures applying to students on excursions must be consistent with the school's student code of conduct and with the statewide *Student Discipline Procedures* 1994 (incorporated within the Department's [Guidelines for Developing the Student Code of Conduct](#)). From 2010 these policies will be replaced with the [Effective Schools are Engaging Schools – Student Engagement Policy Guidelines](#). The disciplinary measures used to enforce a dress code will need to be consistent with the school's student engagement policy.

In extreme cases the excursion staff, following consultation with and the approval of the school principal, may determine that a student should return home during an excursion. In such circumstances, the parent/guardian should be advised:

- of the circumstance associated with the decision to send the student home
- of the time when the parent/guardian may collect their child from the excursion or the anticipated time that the student will arrive home.

When returning a student home, consideration should be given to the age and maturity of the student when travelling arrangements are made.

It is recommended that schools ensure that when parents/guardians sign the approval for their child to attend the excursion that they consent to their child being sent home in the event of the child's serious misbehaviour on the excursion.

Parents/guardians should also be advised that any costs associated with the student's return will be the responsibility of the parents/guardians.

4.4.2.10 Use of private motor vehicles

The use of private motor vehicles should be avoided whenever possible, although it is recognised that there are occasions when a small number of students may need to be transported.

Excursion staff cannot be directed by their principal to transport other excursion staff, school students or equipment in connection with any school function.

Students are not permitted under any circumstances (except in accordance with an approved pre-licence driver education program, see section [4.4.5.5](#) Traffic safety education) to transport other students in

private vehicles in connection with any school program or function, whether held during normal school hours or at other times.

When a private vehicle is to be used to transport students it should only be driven by a member of the supervising staff. The parent/guardian of each student should be advised that their child may be transported in a private vehicle.

The principal should verify that any vehicle used for the transport of students is currently registered and that the driver holds a valid driver's licence.

Accurate records should be kept of the names of students travelling in each vehicle used on an excursion. In the event of a road accident, this information may be needed by emergency services for identification purposes and before parents/guardians of the injured can be informed.

Any vehicle used in connection with the school program or any school function should have a comprehensive insurance policy (see 4.10.6).

4.4.2.11 Use of light aircraft and helicopters

If aircraft are to be used other than on regular commercial flights, the school must only contract with a licensed charter operator. A licensed charter operator is required to meet specific safety requirements and to carry insurance for passengers under carrier's liability. It is essential that proof of insurance be received from the charter operator prior to the charter commencing.

Unless a student is known to have a particular medical problem, a special medical clearance is not necessary. However, it is important to ensure that passengers are free from head colds. Air pressure changes can cause severe discomfort to the ears when flying in unpressurised aircraft and, in extreme cases, could lead to rupturing of eardrums.

Principals or school councils contemplating helicopter arrivals or departures from the school grounds should note that there are stringent requirements with regard to helicopter landing sites (see [4.4.6.10](#)).

4.4.2.12 Overseas and interstate (domestic) excursions

Department of Education and Early Childhood Development requirements and guidelines that apply to the conduct of excursions are applicable to all overseas and interstate (domestic) excursions (see [4.4.2](#)).

The following guidelines specifically relate to overseas excursions:

- when considering overseas excursions for approval, school councils must take into account the circumstances that exist in the areas to be visited with regard to student and staff safety and welfare
- staff employed by the Department of Education and Early Childhood Development who are part of the supervising staff on an overseas student excursion must gain approval from the appropriate regional director to travel overseas. The appropriate form can be found in [EduLibrary](#) under Schools/Guidelines/Travel Guidelines

- the Commonwealth Department of Foreign Affairs and Trade provides current consular travel advice for intending travelers. See www.dfat.gov.au and Smartraveller at www.smartraveller.gov.au.
- the cost of medical and hospital treatment is high in some countries, therefore all students and staff should take out travel and medical insurance for the entire trip
- emergency planning should be sufficiently detailed to provide for a range of situations that might occur during the excursion. All excursion staff and students, as well as relevant school staff, should be familiar with the procedures contained within the emergency plan.

For domestic (interstate excursions), staff employed by the Department of Education and Early Childhood Development who are part of the supervising staff on the excursion must be approved by the principal as members of the excursion. The appropriate regional director approves the principal as a member of the excursion. The appropriate form can be found in [EduLibrary](#) at Schools/Guidelines/Travel Guidelines.

4.4.3 Adventure activities

Adventure activities are those that involve greater than normal risk such as:

- travel into a relatively undeveloped area of country in which vehicle contact is difficult and/or uncertain
- less than normal contact, by person or by telephone, with medical and other public services available in normal day-to-day life
- exposure to the natural elements with less than the normal physical protection provided in day-to-day life
- confrontation with natural environmental challenges requiring greater reliance upon personal resources than would normally be required in day-to-day life
- adventure activities listed on the Safety Guidelines for Education Outdoors website, such as abseiling, activities using artificial climbing and abseiling walls, bushwalking, canoeing/kayaking, activities using challenge ropes courses, cross country skiing, downhill skiing and snowboarding, horse riding, orienteering, rafting, recreational swimming, rock climbing, sailing, scuba diving, sea kayaking, snorkeling, surfing, water skiing, windsurfing and other similar activities.

The guidelines and requirements for school excursions (see [4.4.2](#)) apply to the organisation and conduct of adventure activities.

Policies on legal liability ([see 6.16](#)); risk management ([see 6.14](#)) and emergency and security management ([see 6.15](#)) should be understood before embarking on an adventure activity.

Information concerning staff-student ratios, staff qualifications, staff experience, student preparation, protective clothing and other safety measures is provided in the [Safety Guidelines for Education Outdoors](#) website.

Information provided by community groups and organisations that specialise in adventure activities should also be taken into account,

especially for activities that have no Department of Education and Early Childhood Development guidelines.

In line with existing practices, teachers or contracted instructors who lead adventure activities must have the required experience and qualifications or document these in lieu of certification or accreditation. Principals need to carefully check the qualifications and experience of any teacher or instructor who is leading any adventure activity, and make sure that these are appropriate for the activity planned.

A pro-forma that can be used to document staff qualifications and experience in lieu of certification/accreditation can be found at:

<http://www.education.vic.gov.au/management/schooloperations/edoutdoors/forms.htm>

4.4.3.1 Higher risk adventure activities

The nature of some adventure activities means that additional precautions need to be taken to minimise and control the risk to students.

In addition to the requirements and guidelines for excursions (see [4.4.2](#)) and adventure activities (see [Safety Guidelines for Education Outdoors website](#)) the following guidelines apply:

Caving

- Only teachers and other adults who have extensive caving experience are to lead and supervise students involved in caving activities.
- Only the simplest caves are to be attempted with novices.
- There should be a ratio of no more than five students to one instructor with a minimum of two excursion staff members always present.
- Permission to enter caves should be obtained from the appropriate land manager.

Flying and hot air ballooning

- Only commercial operators appropriately licensed to carry passengers may be used for school organised activities (see also [4.4.2.11](#)).

Gliding

School-organised activities involving gliding may only be undertaken through gliding clubs. These can occur as:

- 'joyflights', under the auspices of an Air Operator's Certificate, with the glider commanded by a pilot holding a Gliding Federation of Australia charter rating. Persons undertaking such flights do so under the terms of the Commonwealth Carrier's Liability Act with the associated limited liability that this confers. No membership of the Gliding Federation of Australia is required
- 'trial instructional flights', which will involve becoming a daily member of the Gliding Federation of Australia. Such flights are commanded by a pilot holding a minimum of a Gliding Federation of Australia air

experience instructor authority and come under the protection of the comprehensive range of Gliding Federation of Australia insurances.

Other

The following activities are considered to be unsuitable for school students because of the potential risks involved:

- bungee jumping
- hang gliding
- parachuting
- flying ultra light aircraft.

Adventure Activity Standards have been developed by the outdoor recreation and adventure tourism industry and are agreed minimum activity standards for adventure operators. They do not necessarily reflect the greater duty of care owed to students.

For activities not listed on the [Safety Guidelines for Education Outdoors website](#), principals, teachers and school council members need to comply with these standards when planning or endorsing a school adventure activity camp or excursion, and consider the greater duty of care that may be required for students.

The Adventure Activity Standards can be found at:

www.orc.org.au - under the heading 'Activity Standards'.

4.4.4 Swimming and water safety programs

These guidelines apply to swimming and water safety activities involving students. They do not apply to aquatic activities where the program objectives are not associated with learning swimming and water safety (for example, canoeing, boating and yachting).

4.4.4.1 The swimming program

Swimming is an integral and essential part of physical education from Prep to Year 12. Programs should consist of a sequence of swimming, water safety, survival, rescue and emergency procedure experiences that will provide students with the skills, knowledge and confidence required for safe involvement in aquatic activities.

4.4.4.2 Guidelines for teaching and supervision

In this section, the following definitions apply:

'Staff' refers to adults, including teachers and instructors, approved by the principal.

'Teacher' refers to a person employed by the Department of Education and Early Childhood Development or the school council as a teacher.

A minimum of two staff is required to supervise students participating in school swimming programs. A teacher employed by the Department of Education and Early Childhood Development or the school council must be in attendance and have overall responsibility for the activity.

In addition to teachers, the staff for swimming programs may include other adults who have been approved by the principal, including parents/guardians, school services officers and employees of municipal or commercial swimming pools.

It is the principal's responsibility to ensure that all staff are capable of undertaking the duties assigned to them. Staff engaged in swimming instruction must have the necessary knowledge and skills to teach swimming and water safety, and have the ability to competently initiate emergency rescue and cardio pulmonary resuscitation (CPR).

Rescue and CPR requirements specified in the AUSTSWIM Teacher of Swimming and Water Safety Certificate, and the CPR requirements specified in the Royal Life Saving Society of Victoria Resuscitation Certificate and the Surf Life Saving Victoria Resuscitation Certificate are considered to be appropriate levels of competence.

It is recommended that a record of staff qualifications relevant to swimming and water safety programs be maintained at the school. The record should include the date of issue and any subsequent renewal or upgrade.

4.4.4.3 Emergency procedures and safety measures

Emergency action includes rescue, resuscitation and first aid procedures; the facility to contact a doctor, ambulance or other emergency service; and the supervision of all other students at the venue.

Each school must have as part of its planning for a swimming program, a clearly written set of emergency procedures that is understood by those involved in the program. It is essential that all staff and students know where to assemble and how to implement the school's emergency procedures if an emergency arises.

The emergency procedures should be in harmony with the procedures adopted by pool owners, pool managers or rescue and life-saving patrols. They must outline areas of responsibility and organisation required to carry out a rescue and maintain safety for the remainder of the students.

The teacher in direct control of the swimming group is legally responsible for implementation of the procedures that may include the involvement of others who have more experience in dealing with emergencies.

4.4.4.4 Specific safety measures

Each staff member must be appropriately positioned to effectively account for all students in their respective swimming groups at all times.

The use of a 'buddy' system can be a useful safety measure during lessons and should be incorporated into the emergency plan as a check of student safety.

All staff engaged in swimming instruction must be prepared for and able to cope with an emergency rescue situation and be able to apply CPR.

Aids such as ropes, poles and approved buoyancy devices that can be used for emergency rescues should be readily and immediately available

at each teaching station and other places where students are swimming or diving.

All staff involved in swimming instruction must be appropriately attired to perform an immediate contact rescue if necessary.

4.4.4.5 Staff qualifications, staff–student ratios, student experience

The major part of the swimming and water safety program can readily be conducted at municipal and commercial swimming pools or shallow-water natural venues as defined below. The program may also include extension activities where more advanced swimming and water safety skills are developed at open, deep-water natural venues and surf beaches.

The guidelines for staff–student ratios, staff qualifications and student experience vary according to the type of venue and the perceived level of risks associated with the activity. The staffing ratios in this reference guide provide the minimum requirements for school activities. When principals and teachers are planning swimming and water safety programs, the age and experience of the students as well as the venue and experience of staff must be taken into account.

4.4.4.5.1 Venue type 1: Swimming pools and confined, shallow natural-water venues

Type 1 venues include municipal and commercial swimming pools as well as shallow, calm, confined swimming areas at natural venues such as lakes, dams and non-surf beaches. A shallow, natural-water venue is defined as a venue where the maximum depth of the water is no greater than shoulder height for any of the students involved in the program. The swimming area at natural venues must be clearly defined and surrounded by safety barriers such as the shoreline, piers, jetties or floating ropes. Appropriate rescue aids must be located close to the teaching areas.

Staff–student ratios

There should be a minimum of two staff present at all swimming programs. One staff member who is a teacher employed by the Department of Education and Early Childhood Development or the school council must have overall responsibility for the program.

The minimum overall staff–student ratio should be:

- Beginners (shallow water—little or no experience) 1:10
- Intermediate (basic skills and able to swim twenty-five metres with a recognisable stroke) 1:12
- Advanced (able to swim fifty metres using two recognisable strokes and demonstrate one survival stroke in deep water) 1:15

Staff qualifications

At least one staff member involved in instruction must hold an AUSTSWIM Teacher of Swimming and Water Safety Certificate. Wherever possible a second staff member should also hold an AUSTSWIM Teacher of Swimming and Water Safety Certificate.

4.4.4.5.2 Venue type 2: Open deep-water venues

Type 2 venues include deep and/or flowing water at non-surf beaches, lakes, channels, rivers and dams. Additional hazards associated with this venue type mean that the swimming area should be divided into appropriate group teaching stations, each with recognisable boundaries such as banks, shorelines, flags, piers or floating ropes. Small boats, rafts or floating platforms could be placed strategically for added safety. Appropriate rescue aids must be located close to the teaching areas.

Staff–student ratios

There should be a minimum of two staff present at all swimming programs. One staff member who is a teacher employed by the Department of Education and Early Childhood Development or the school council must have overall responsibility for the program.

The minimum overall staff–student ratio should be one staff member to no more than ten students.

Staff qualifications

All staff involved in instruction must hold an AUSTSWIM Teacher of Swimming and Water Safety Certificate, and at least one staff member involved in instruction must hold one of the following:

- a current Bronze Medallion of the Royal Life Saving Society of Australia
- a current Patrol Bronze Medallion of the Surf Life Saving Association of Australia
- a current Surf Rescue Certificate of the Surf Life Saving Association of Australia.

Student experience

It is expected that students taking part in deep-water activities will be able to competently complete the following sequence:

- a jump entry
- survival sculling, floating or treading water for five minutes, a slow swim for five minutes using a different survival stroke (with the arms below the surface of the water) each minute, a feet-first or head-first surface dive
- float for one minute using a flotation aid, swim continuously for 200 metres using a recognised stroke.

4.4.4.5.3 Venue type 3: Surf beaches

Type 3 venues include all beaches with direct access to ocean waters. Where possible, programs should be conducted at patrolled beaches. At an unpatrolled beach, staff should be trained in the use of surf rescue equipment and aids. Appropriate rescue aids must be located close to the teaching areas.

Staff–student ratios

There should be a minimum of two staff present at all swimming programs. One staff member who is a teacher employed by the Department of Education and Early Childhood Development or the school council must have overall responsibility for the program.

The minimum overall staff–student ratio should be one staff member to no more than five students.

Groups should not exceed fifty students.

Staff qualifications

All staff involved in instruction must hold an AUSTSWIM Teacher of Swimming and Water Safety Certificate, and at least one staff member involved in instruction must hold one of the following:

- a current Patrol Bronze Medallion of the Surf Life Saving Association of Australia
- a current Surf Rescue Certificate of the Surf Life Saving Association of Australia.

Student experience

It is expected that the students taking part in surf-beach activities will be able to competently complete the following sequence:

- enter deep water using a feet-first entry
- in water of at least waist depth, dive into the water to simulate an entry under a wave
- demonstrate a feet-first and a head-first surface dive
- demonstrate for one minute how a flotation aid may be used as a support, reassure any other swimmers by talking with them, swim slowly using a combination of three survival strokes for ten minutes, remove such clothing as desired (the clothing may be used for flotation), demonstrate survival sculling, floating or treading water for a total of five minutes
- demonstrate waving one arm occasionally as if signalling for help.

4.4.4.6 Recreational swimming

Recreational swimming sessions occur where the learning of swimming and water safety is not the prime objective. These less structured sessions can increase the likelihood of accidents and drownings.

A minimum of two staff should be present for all recreational swimming activities. One staff member who is a teacher employed by the Department of Education and Early Childhood Development or the school council must have overall responsibility for the program.

Staff qualifications and staff-student ratios for recreational swimming may be found on the [Safety Guidelines for Education Outdoors](#) website in the [recreational swimming](#) activity guidelines.

4.4.4.7 Swimming: medical warnings

4.4.4.7.1 *Medical histories*

Principals should ensure that staff associated with a swimming program are familiar with the medical histories of students, particularly with respect to epilepsy, diabetes, asthma and heart conditions.

The risk of infecting other swimmers means that students suffering from ear infections, throat infections, colds, papillomas and other contagious infections should not be permitted to enter swimming pools until they have recovered.

It is advisable to seek advice from a parent/guardian before including any student with a chronic illness in a swimming program. If there is any doubt concerning a student's reaction to any aspect of the program, the parent/guardian should be advised to seek a medical opinion on the matter.

If special precautions are required and the school is not able to provide the necessary supervision, the parents/guardians must take responsibility for ensuring that safety requirements are met without interference with the swimming class supervision. If a student's suitability for inclusion in a school swimming program is in doubt, principals should consult the parent/guardian and the student's doctor or seek advice from Children's and Family Services at the Department of Human Services.

4.4.4.7.2 *Hypothermia*

For many months of the year the water temperature of most of Victoria's waterways and many cold-water pools is sufficiently low to induce loss of body heat. Exposure to cold conditions can lead to the body-heat-loss illness known as hypothermia. This is a progressive condition that starts with shivering. Further stages are mental confusion, muscle stiffness, irregular heartbeat, unconsciousness and ultimately death. Water temperatures are unlikely to be so low as to produce the extremes of hypothermia, but swimming programs should not be conducted if there is a danger to students.

4.4.4.7.3 *Sunburn*

Care should be taken to encourage students to protect themselves from excessive exposure to sunlight. While everyone is at risk of developing skin cancer, fair-skinned people with reddish or fair hair are at greater risk. People with olive complexion and dark hair have a lower risk, but still require protection. Sunburn during childhood has been shown to increase the chance of skin cancer in later life. Protective clothing, hats and sunglasses should be worn. Skin protection by waterproof sun creams or clothing is necessary while in the water.

Broad-spectrum sunscreen creams and lotions can also be used to protect the skin. Those with the highest sun protection factor, SPF-30 or greater, are suitable for most skin types. Special preparations such as zinc cream are available for sensitive areas, including the face and lips. Hats that shade the face and neck should be encouraged. Schools should aim to develop in students an awareness of the danger of over exposure to sunlight, and encourage effective protective strategies.

For further information about skin cancer see [4.5.11](#).

4.4.4.7.4 Epilepsy

If a student has been observed or is otherwise known to be subject to epilepsy or any form of medical condition involving periodic loss of consciousness, the student should be permitted to swim provided that a medical certificate is provided by the parents/guardians stating that it is safe for the student to do so. Such a certificate is normally valid for twelve months. A new certificate is required after a period of twelve months or earlier if a further episode of loss of consciousness is known to have occurred.

A certificate that is conditional upon special precautions being taken should not be accepted, unless the parents/guardians arrange the additional supervision necessary and accept complete responsibility for the safety of their child during swimming classes, and then only if the principal is satisfied that the special arrangement made will not interfere with the conduct of the swimming class.

For further information about epilepsy see [4.5.3](#).

4.4.4.7.5 Asthma

Swimming is regarded as a strenuous activity and asthmatic students may require medication before and during a swimming lesson. Suitable medication should be available at the swimming venue. Principals should request the parents/guardians of asthmatic students to provide written consent to their child's participation in the swimming activity. This consent should indicate that their doctor has no objection to the student participating in swimming activities.

For further information about asthma see [4.5.7](#).

4.4.4.7.6 Diabetes

A diabetic student should be permitted to take extra food at odd times before extra physical activities, such as swimming, to prevent insulin or hypoglycaemic reactions. It is advisable for the teacher to ensure there is ready access to food (for example, fruit, biscuits or fruit juice). With these precautions, all diabetic students should be encouraged to take a full part in all activities, including swimming. The Royal Children's Hospital Diabetic Clinic is able to provide additional information or advice to the school if required.

For further information about diabetes see [4.5.6](#).

4.4.5 Safety in the curriculum

As part of their legal duty of care to students, principals are responsible for ensuring that appropriate risk identification and management processes are implemented throughout the school and for all areas of the curriculum (see [6.14](#)).

The following requirements and guidelines need to be noted by schools when identifying such risks and management procedures.

4.4.5.1 Science

Student safety guidelines provide safety advice for students in Prep to Year 12 participating in science activities. They were distributed to schools during 2003 and supersede previous information distributed to schools regarding student safety in science.

While the principal has overall responsibility for safety in a school, it is the responsibility of all teachers of science to ensure that science classrooms, laboratories and preparation rooms are safe areas for all students and staff.

In this respect the science learning area should have a formal safety policy. Included in the policy should be:

- guidelines for the storage of chemicals. See the Guidelines for the Storage of Science Chemicals and the Dangerous Goods Implementation Kit, which are available on the Human Resources website at:
<http://www.eduweb.vic.gov.au/hrweb/ohs/worken/chem.htm>
- rules for the disposal of residue and waste chemicals
- rules for student behaviour
- requirements in relation to protective clothing
- details about the location of safety and first-aid equipment, including the types and locations of available fire extinguishers
- emergency evacuation procedures.

Practical work is an important aspect of science education and, as such, should be included in the various aspects of the science curriculum. There are, however, potential hazards associated with practical work that require appropriate safety measures.

When selecting experiments teachers should take into account the nature of the class, its size, its behavioural maturity, its level of skills and the facilities available. It is essential that all experiments be trialled by the teacher using the identical procedures that students are expected to follow.

4.4.5.1.1 *Biological materials*

Blood lancets

Samples of blood from students must not be taken as a classroom exercise. Lancets have been withdrawn as supply items and any similar item should not be purchased for use in schools. If a microscope examination of blood is required, prepared blood slides should be purchased.

Microbiology: use of *Serratia marcescens*

A number of reference books on microbiology and bacteriology advocate the use of *Serratia marcescens* in practical work. Cultures of this bacterium are available from a number of biological supply houses.

Although *Serratia marcescens* was once regarded as non-pathogenic, there is now a substantial body of evidence that it acts as an infectious agent in pneumonia, meningitis, sinusitis and a wide variety of other

diseases. Furthermore, *Serratia marcescens* presents immunological problems in that it is very resistant to antibiotics. In view of this evidence, *Serratia marcescens* should not be used unless appropriate septic techniques are applied.

Non-pathogenic bacterial colonies

Brightly coloured non-pathogenic bacterial colonies may be obtained by exposing a nutrient agar plate to the open air for an hour and then incubating it at 25° C until colonies appear. It is also possible that a pathogenic colony could grow unintentionally. Therefore, teachers are encouraged to grow all cultures in sealed disposable containers.

Teachers are reminded that students should not touch bacterial colonies. After use, care should be taken to ensure that all bacterial colonies are destroyed, and that glassware and instruments used are sterilised.

Animal tissue

Animal tissue, where it is contaminated or potentially contaminated with an infectious organism, or where it has been treated with chemicals that are known to be environmentally unsafe, must be disposed of at an Environment Protection Authority (EPA) approved biomedical waste incinerator (see Incineration below).

Other animal tissue, and animals such as those used for dissection purposes (unless they have been treated with drugs or chemicals), may be disposed of at an appropriate EPA licensed landfill if contained in leak-proof sealed bags.

Incineration

To find an EPA-approved biomedical waste incinerator teachers can search the Industrial Waste Database on the EPA Victoria website at: <http://www.epa.vic.gov.au/> under the main category Clinical and Pharmaceutical Waste and subcategory Clinical and Related Waste (biomedical waste). A list of treaters/disposers can be found at:

<http://www.epa.vic.gov.au/waste/iwdb/default.asp>

These incinerators are operated with appropriate emission control equipment to meet EPA requirements for the incineration of all types of biomedical waste, including pharmaceuticals and infectious waste.

For the latest information on the disposal of infectious waste, contact should be made with the EPA Customer Service and Information Office, telephone 9695 2722.

Dumpmasters

Uncontaminated animal material must be placed in a sealed plastic container (for example, a double-thickness tied plastic bag) with disinfectant solution before being placed in a dumpmaster that will be cleared within forty-eight hours. If the dumpmaster is not cleared within forty-eight hours, the material must be kept refrigerated.

Local council tips

Uncontaminated animal material prepared as for a dumpmaster may also be disposed of in council tips (landfills) provided that it is covered on the day of disposal. In country areas, the local health surveyor should be contacted to make the necessary arrangements. Note that in some country areas, tips may be covered only once a fortnight.

On-site burial

Animal material should not be buried on-site.

Sink disposal units

Animal tissue must not be disposed of using an in-sink disposal unit.

4.4.5.1.2 Explosives

The study of explosives and the explosives industry is not considered a suitable topic in secondary science courses, and should not be used as a project or practical work element of these courses.

It is illegal to mix chemicals to make any explosive or pyrotechnic composition except at a licensed explosives factory (Dangerous Goods (Explosives) Regulations 2000). Access to chemicals in school laboratories should be strictly controlled, especially for those substances liable to be utilised as ingredients of explosive mixtures. Grave accidents involving loss of life, limb or eyesight have resulted from mixing chemicals surreptitiously taken from school laboratories.

4.4.5.1.3 Chemicals

The use and storage of chemicals must be monitored effectively. Teachers should refer to the Guidelines for Storage of Science Chemicals found on Human Resources website at:

www.eduweb.vic.gov.au/hrweb/ohs/worken/chem.htm

Other relevant documents for chemical safety are the Occupational Health and Safety Regulations 2007, Part 4.1 Hazardous Substances which comes under the Occupational Health and Safety Act 2004 and the Code of Practice for Storage and Handling of Dangerous Goods 2000. For advice and support refer to the Human Resources website at:

www.eduweb.vic.gov.au/hrweb/safetyhw/environ/danger.htm

Storage of chemicals

The storage of chemicals must take into account the incompatible nature of many chemicals. Incompatible chemicals should not be stored in close proximity. An appropriate storage scheme, based on storage zones determined by the hazardous properties of chemicals, is outlined in Guidelines for the Storage of Science Chemicals. Difficulties with handling and storage of chemicals can be significantly reduced by minimising the quantities held in storage.

Chemicals should only be purchased in quantities sufficient for immediate needs. Cost savings resulting from the purchase of large amounts of potentially dangerous chemicals do not justify the hazards associated with long periods of storage.

In the event of a chemical emergency, schools should seek the assistance of the fire brigade. If specialist advice is needed about chemicals or to report pollution emergencies, telephone the EPA on telephone 9695 2777.

Dichloroethane (ethylene dichloride)

In view of the potential hazards associated with the use of 1,2 Dichloroethane, schools are directed to withdraw this chemical from use immediately.

Permits for purchasing chemicals

Requirements of the *Drugs, Poisons and Controlled Substances Act 1981* are that chemicals listed in the schedules 4, 8 and 9 of this Act and listed regulated poisons cannot be supplied or possessed unless a school has an educational permit. None of these chemicals is commonly used in schools. In addition, a permit is required for the following chemicals: arsenic, benzene, cacodylic acid, hydrocyanic acid, potassium or sodium cyanide, strychnine and vinyl chloride monomer, which are listed in schedule 7.

The schedules to the Act are published in the Standards for Uniform Scheduling of Drugs and Poisons. Listed regulated poisons are contained in the Poisons Code, which can be obtained from the Drugs and Poisons Regulation Group of the Department of Human Services, telephone 1300 364 545.

End User Declaration for purchasing chemicals

Chemicals that are either classified as 'drug pre-cursors' or can be used to manufacture illicit drugs will require an End User Declaration to be completed and approved prior to the supply of these chemicals. A template for the End User Declaration form and further information is available from:

<http://www.pacia.org.au/uploaditems/docs/6.illicitdrugcode.pdf>

Poisons permit

The Drugs and Poisons Regulation Group of the Department of Human Services issues applications for educational permits. The permit lists approved persons, who must either be on the premises or in a position to give directions when the chemicals are used. Permits are renewable annually. It is therefore essential that the information in the application is current. At least two people should be nominated.

Where schools already possess chemicals for which a permit is required, the need for a permit can be avoided by the legal disposal of these chemicals.

Storage of flammable liquids

Flammable liquids should be stored in an appropriate flammable liquids cabinet in accordance with the Dangerous Goods (Storage and Handling) Regulations 2000 or the Code of Practice for Storage and Handling of Dangerous Goods 2000 which comes under the *Dangerous Goods Act 1985*.

Disposal of chemicals

The continued storage of chemicals no longer needed for current courses, chemicals in quantities in excess of current needs and waste chemicals pose a potential safety hazard. These materials must be disposed of by an EPA-approved waste contractor (contact the EPA Customer Service and Information Office, telephone 9695 2722).

Wine: use in chemistry classes

Experiments suggested for use in Year 12 Chemistry courses can involve the analysis of wine. Such experiments may be performed provided that:

- the wine is obtained by the school in the smallest appropriate quantity
- when the analysis is completed, unused wine is not held on school premises
- students are not permitted to bring samples of wine to school, to take any unused wine away from the school, or to taste or drink any of the wine provided for analysis.

Volcano experiments: use of ammonium dichromate

Ammonium dichromate should not be used to perform volcano demonstrations in the classroom as it is an irritant and carcinogen. A product of the volcano demonstration, chromium (III) oxide is also a recognised carcinogen, corrosive to living tissue and could severely irritate lungs, eyes and skin.

4.4.5.1.4 Permit to store nuclear materials

Under the regulations of the *Nuclear Non-Proliferation (Safeguards) Act 1987* (Commonwealth), a permit may be required to store nuclear materials, in particular uranium and thorium compounds, including processed uranium ore (yellow cake), uranium compounds (for example, uranyl nitrate), special preparations for specific purposes (for example, uranium cow used in half-life experiments) and thorium hydroxide (supplied with some Wilson cloud chambers).

Most radioactive sources used in schools do not contain plutonium, uranium or thorium metal and are sufficiently small not to require a permit.

Further information is available from the Commonwealth Department of Primary Industry and Energy (Australian Safeguards Office).

Use of ionising radiation in schools

Schools that wish to use ionising radiation or radioactive materials in their science programs are advised to obtain a copy of the National Health and Medical Research Council's Radiation Health Series No. 19. Code of Practice for the Safe Use of Ionising Radiation in Schools (1986), which is available from the Radiation Safety Section of the Department of Human Services, on telephone 9412 7560.

4.4.5.1.5 Lasers

Schools that wish to use lasers in their science programs are advised to obtain a copy of the National Health and Medical Research Council's Radiation Health Series No. 36. Code of Practice for the Safe Use of Lasers in Schools (1995), which is available from the Radiation Safety Section of the Department of Human Services, on telephone 9412 7560.

4.4.5.1.6 Mercury decontamination procedures

Mercury poisoning

Mercury is a volatile metal that slowly vaporises at room temperature. If it is not cleaned up it will remain in the environment for a very long period of time and may cause poisoning. Metallic mercury poisoning can occur from the absorption of inhaled mercury vapour over an extended period (that is, months or years) though this type of poisoning is rare because the hazard is usually readily contained. Poisonings have only occurred because inappropriate clean up methods were employed or no clean up was attempted at all.

Cleaning mercury spillages

Mercury spillages must be cleaned up immediately they occur. Initially, all visible mercury droplets should be recovered using a suitable aspirator device. Suitable devices for small-scale spills or thermometer breakages in science laboratories may be constructed by using either a Dreschel bottle or a flask with side arm.

A vacuum source should be connected with tubing and a pasteur pipette attached to the other outlet of the bottle with tubing. The pipette is then used to suck up the mercury droplets into the collecting bottle that acts as a trap for the recovered metal.

The tubing must be connected to the bottle so that the mercury is retained in the bottle and not drawn into the vacuum source. The recovered mercury should be stored in a heavy-gauge sealable plastic container for storage or subsequent disposal.

Decontamination after clean up

If very small droplets cannot be recovered with the aspirator, they should be covered with sulfur powder or zinc dust and left undisturbed for twenty-four to forty-eight hours to ensure amalgamation and subsequent removal when the decontaminant is swept up. Finally, the contaminated surfaces should be washed with a lime sulfur solution containing a wetting agent, allowed to dry overnight or over the weekend, and the residue collected by vacuum cleaning.

Several commercially available preparations are suitable for lime sulfur solutions. Half a teaspoon of a wetting agent such as Ortho Spray Sticker, Agral 60 or Geigy Plus 50 should be mixed with 450 mL of lime sulfur garden spray (Hortico or Lanes) and 9 L of water and mopped onto the floor. Care should be taken to avoid having this solution come in contact with motors, electrical equipment and so on as the sulfur has an affinity for metals.

The recovered mercury and any used decontaminant may be retained in tightly sealed containers for future use, or may be disposed of through an approved EPA waste disposal contractor.

Large spills

In the event of a large mercury spill over a considerable area, the above decontamination procedure should be followed. Comcare should be contacted at: <http://www.comcare.gov.au/>

4.4.5.2 Technology

Technology students are likely to be using a range of tools and machines (plant) that, by their nature, present a higher risk than other areas of the curriculum.

4.4.5.2.1 Safe use of plant and equipment

The Occupational Health and Safety Regulations 2007 (Part 3.5 – Plant) require employers to identify and control risks associated with plant and equipment in the workplace. The principal is responsible for ensuring that the relevant safety precautions for operating plant and equipment in the school are implemented and that teachers have had the appropriate training and have attained the required levels of competency in the safe use of plant. This section expands on safety precautions and competency requirements for working safely in Technology.

The *Occupational Health and Safety Act 2004 (OHS Act 2004)* and, in particular, the Occupational Health and Safety Regulations 2007, impact substantially on the provision of Technology in schools with particular regard to safe systems of work, use of plant, manual handling, noise and hazardous substances. All relevant aspects of these legislative provisions as they apply to schools must be implemented. For further information see [Victorian Acts & Regulations](#).

4.4.5.2.2 Safe systems and risk management

The *OHS Act 2004* requires the Department of Education and Early Childhood Development (DEECD) to establish and maintain safe systems of work in Technology. This must include an effective means of identifying hazards and implementing controls. This involves the elimination of risk where practicable and managing residual risk in a manner that reduces this risk so far as is reasonably practicable. (See also Sections 4.6, 6.14, 6.16)

Technology teaching environments are exposed to a wide range of potential risks that include hazards associated with the use of plant, materials handling and the physical and psychosocial environment. To manage these risks the hierarchy of control must be applied. The highest

order control and the most effective, is **Elimination**. In most cases risks will not be able to be eliminated completely and a combination of control measures will need to be implemented to mitigate risk.

- **Eliminate** or reduce the risk by adopting safer curriculum options, systems of work and alternative processes etc
- Reduce the risk exposure by **Substituting** safer plant and equipment
- **Isolate** hazardous elements of plant by using an enclosure
- Apply **Engineering** controls e.g. machine guarding or ventilation
- Develop and apply **Safe Work Procedures** for plant use and maintenance
- Ensure employees and students have access to relevant OHS **Training** to work safely in Technology
- Supply and wear **Personal Protective Equipment (PPE)**.

The following elements of the Technology teaching environment also require consideration when proposing the application of effective OHS risk control measures.

- Curriculum design and provision including restricting access to selected items of plant (see items on Restricted List below)
- Work system design including materials preparation, storage and ergonomic work flows
- Physical environment including safe layout and design so that students can work safely and be effectively supervised; adequate natural or artificial light in all places where students or staff work or walk; appropriate ventilation for activities that involve dust, gases or fumes; safe levels of noise exposure for staff and students which do not exceed an exposure standard of 85 dB (A) for continuous exposure, or 140 dB (c) for peak levels of exposure
- Plant and equipment design, start-up and use, guarding, maintenance and layout including the effectiveness of any ancillary devices such as dust and exhaust extraction
- Personal Protective Equipment (PPE) – employees and students must use appropriate protective clothing/equipment at all times when exposed to hazards. Such clothing/equipment includes safety glasses, ear muffs, dust masks, gloves, sturdy footwear and protective coats or aprons.

Additional factors for consideration by teachers include:

- Personal skill level of the students including their knowledge of the activity and environment, their attitude, level of maturation (physical and mental), confidence, previous experience and any disabilities and special medication needs
- Preparation and readiness of the students, including sequential skill development, awareness of and training in safety procedures and thorough briefing prior to the activity
- Organisational arrangements for conducting the activity, including the number of students in the class, the size and layout of the classroom, and the space available for the safe use of the machines and equipment
- Teacher's skill level, degree of experience and competence
- School records of previous incidents, accidents or near misses

- Information contained in the VELS (Victorian Essential Learning Standards) in relation to the complexity of processes to be undertaken in the study of Technology at particular levels.

4.4.5.2.3 Curriculum design and motorised vehicles

It is recommended that the Technology curriculum avoids student projects involving the production of motorised vehicles capable of carrying at least one person, motors or generators given the potential risk of injury during production and use of the final product.

4.4.5.2.4 Technology panel report

The Department released the Technology Panel Report in 2007 (Circular S224-2007) and agreed to implement the recommendations of the Panel Report. Several of the recommendations referred to the training, testing and formal recognition of teachers and students in competent and safe plant use.

4.4.5.2.5 Teacher safe use and competency

Principals must ensure that teachers have appropriate training and experience with the use of the plant and equipment that students will use in their classes. All plant and equipment must be maintained in safe working condition.

The VRQA accredited, 'Course in Safe Use of Machinery in Technology Teaching' (21820VIC) provides relevant training for teachers to pass the competency test and to assist them develop and implement machine safe use competency tests appropriate for their school and students. The short course comprises the following units:

- Applying OHS Principles to Technology Teaching - VBQU618 – 8hrs
- Safely Operate and Maintain Wood Working Machines – VBQU619 – 16hrs Prerequisite - VBQU618
- Safely Operate and Maintain Metal Working Machines – VBQU620 – 8 hrs Prerequisite - VBQU618

Teachers are required to enrol in the short course and pass a safe use competency test in the items of machinery used in their workshops before December 2009. The safe use competency test applies to each item of powered plant where student supervision is required. Teachers receive an individual Certificate of Attainment describing the machinery in which they have been assessed as safe and competent. Tests are valid for five years and a corresponding record of the teacher's machine use competencies should be held in the teacher's personnel record for at least seven years.

The course is conducted by participating TAFEs utilising both TAFE and accredited school venues in each region. Contact your [Regional OHS/WorkCover Contact](#) or local TAFE for further details. For further information on course content see [Managing Technology Risk](#).

4.4.5.2.6 Student safe use and competency

Students who complete a school-based safe use competency test will have that documented in a personal student 'pass-book'. Only teachers who have passed a plant and equipment safe use competency test via the VRQA approved short course will be permitted to assess students. The student 'pass-book' will describe the items of plant in which the student has achieved safe use competency. In addition to passing a safe use competency test a student would be expected to answer a set of relevant safety questions and demonstrate safe and mature use of the machine to the supervising teacher's satisfaction over a suitable period of time. A corresponding record of the student's machine use competencies must be held in the school database for at least seven years. Training to achieve competency in safe machine use should be an integral part of the Technology curriculum.

4.4.5.2.7 Safer plant for use by students

The following list comprises plant which has been assessed as safer for student use. However, items can only be used by students under general supervision after the student has passed a Safe Use Competency test. Items have been grouped according to their useful work purpose. For further information see [Managing Technology Risk](#).

Cutting

- Cold Metal Drop Saw
- Power Hacksaw
- Jig Saw
- Scroll Saw
- Cold Metal Saw
- Small Mitre Saw (with simple drop saw action and work-piece secured by clamps or similar constraint)
- Metal Cutting 'Horizontal' Band Saw

Shaping

- Wood Lathe
- Metalworking Lathe
- Plunge Router – where used with either a template or guide fence or, a ball-bearing profile cutter
- Milling Machine
- Angle Grinder

Joining

- Welding
- Biscuit Jointer
- Dowling or Horizontal Drill
- Drill Press (Pedestal or Bench)
- Power Drill

Finishing

- Linisher (Belt & Disc Sander)
- Sanders (Belt & Orbital)

4.4.5.2.8 *Restricted plant*

The following restricted plant items have been assessed as representing a greater risk of injury to students. Consequently their use is restricted to senior secondary students only who have passed a Restricted Plant Safe Use Competency test. (A 'Restricted' Plant Safe Use Competency Test follows the same format as the 'Safer' Plant Test.) Only teachers who have attended the VRQA short course and been assessed as competent in the use of a restricted item of plant are permitted to assess and supervise a student using a restricted plant item.

N.B. Schools are strongly advised to seek alternative methods of achieving curriculum aims through the use of safer plant (refer Safer Plant list).

Schools continuing to utilise restricted plant with students must

1. Complete and document a risk assessment of their technology workshop facility;
2. Undertake and document a plant risk assessment for each restricted item of plant in use.

N.B. Completed risk assessments for a range of technology plant items can be accessed via [Managing Technology Risk](#)

Restricted plant in schools includes:

Cutting

- Rip Saw (Table Saw, Bench Saw)
- Band Saw
- Docking Saw (Cross-Cut Saw, Radial Arm Saw)
- Triton Work Centre
- Portable Circular Saw
- Circular Saw Table
- Slide Compound Mitre Saw & Compound Mitre Saw
- Reciprocating Saw
- Guillotine (Powered or manually-operated)
- Panel Saw

Shaping

- Grinder (Pedestal or Bench)
- Buzzer (Surface Planer)
- Thicknesser
- Spindle Moulder
- Power Wood Shaper
- Portable Planer
- Metal Cut-off Saw
- Table-mounted Inverted Router
- Portable Plunge Router (unsecured) ie without template or guide fence

Note, any item of plant used by a school in its technology area which does not appear on either the Safer Plant list or the Restricted Plant list should be referred to the DEECD OHS Advisory Service on 1300 074 715 for assessment. It will then be added to the appropriate list.

4.4.5.2.9 Supervision of students

The Department must ensure that minimum levels of safe supervision of students are provided in Technology particularly in cases where less experienced students are using items of powered plant.

Supervision of students who are yet to demonstrate competence in the use of Safer Plant and Restricted Plant items (Pre-Safe Use Competency Test students)

Teachers must ensure that no more than one Pre-Safe Use Competency Test student is operating an item of powered plant at any one time. This rule can be adapted in team teaching situations. However, the number of Pre-Safe Use Competency Test students operating powered plant should never exceed the number of teachers authorised to supervise students using the plant.

Supervision of students who have demonstrated competence in the use of Safer Plant items and Restricted Plant items. (Post Safe Use Competency Test students)

Where a student has passed a Safe Use Competency Test for an item of powered plant from the Safer Plant list (as opposed to the Restricted Plant list) supervision need not be exclusively one-on-one. However, the teacher should be available for responding to questions and safety alerts should the need arise. Students should be within view of the supervising teacher except where safe machine operation requires operator isolation (e.g. welding bay work).

Students who are operating a restricted item of plant must have passed a Safe Use Competency Test in that item and must be directly supervised by the Technology teacher at all times.

4.4.5.2.10 Plant safety measures

Plant must be fitted with correct guarding and power isolation switches. Plant must also be fitted with power lock-out devices where practicable. If individual items of plant cannot be fitted with a power lock-out device then a power lock-out device must be fitted to the main power source for all plant to prevent unauthorised access.

Manufacturer's guidelines on the safe use and maintenance of particular items of plant must be implemented. DEECD has developed Generic Plant and Equipment Hazard Management forms and Safe Work Procedure templates for a range of wood and metalwork plant in the Technology area. These materials provide information on guarding, PPE and safe operation of the plant including pre-start operation checks. They can be laminated and displayed adjacent to each item of plant in the workshop.

The forms and procedures can be accessed at [Managing Technology Risk](#).

4.4.5.2.11 Student safety guidelines for technology

The Student Safety Guidelines - Technology CD was provided to schools in 2003. The guidelines continue to inform teachers and students with relevant Technology safety advice spanning Prep to Year 12.

Limited copies of the CD ROM can be sourced through DEECD by contacting (03) 9637 2385.

4.4.5.3 The arts

4.4.5.3.1 Dance

Dance studios need to be well ventilated. If available, a sprung wooden floor should be used. Appropriate footwear should be worn.

4.4.5.3.2 Drama

Consideration needs to be given to the ventilation of drama rooms, use of safety chains on hung lamps and, because of possible allergies, student use of make-up.

4.4.5.3.3 Fluorocarbons

Schools should be aware of the potential danger of the use of fluorocarbons, particularly on primary school students who suffer from asthma and/or bronchitis.

4.4.5.3.4 Kilns

The kiln and installation should meet statutory requirements for safety. The kiln should be fitted with a maximum temperature control regulator (such as an electronic mini temperature controller or a kiln setter device).

Electric kilns

The kiln should be fitted with a door-activated microswitch to turn the elements off when the kiln is opened. It should be provided with adequate mechanical ventilation to the outside atmosphere.

Pottery kilns: purchase and installation

Certain dangers can exist with the installation and operation of a pottery kiln. The following requirements are to be met by schools.

Whole fuel kilns (gas, oil or wood fired)

These kilns are generally too complicated for use in schools. Only thoroughly trained experts should use these kilns. Statutory requirements for gas-fired kilns will preclude these being installed in most schools. Oil-fired kilns, if used, should have a fuel/flame control that stops all fuel flow if the burner is extinguished. Solid-fuel kilns should not be installed inside a building.

4.4.5.3.5 Lead content of pencils and colouring materials

Pencils, toys, finger colours, showcard colours, pastels, crayons, poster paints and coloured chalk used in schools should not have a total lead content greater than 0.01 per cent. Any coating material(s) should not contain greater than 0.25 per cent of lead or compounds of lead.

4.4.5.3.6 Leadlighting

Lead is present in the came used to join stained glass and in solder. During the soldering process, lead fumes and dust are produced. Air sampling results have demonstrated that lead concentrations in air from the soldering process are below occupational exposure standards. However, there may be high lead concentrations in work area dusts and so the ingestion of lead could occur as a result of poor hygiene such as not washing hands prior to eating.

4.4.5.3.7 Media

Photographic darkrooms should be adequately ventilated and chemicals stored and labelled appropriately. Guidelines on darkrooms are available in *School Darkrooms: Planning for Safety, Comfort and Efficiency*, available from the Department's Occupational Health and Safety Unit, telephone 9637 2441.

4.4.5.3.8 Organic solvents

Organic solvents are often used as components of inks, glues and paints. With young students, only water-based paints, markers and glues should be used. Organic solvent-based materials, if required for older students, are to be used only where there is good ventilation.

Primary students are not permitted to use epoxy glues. In secondary colleges, students may only use epoxy glues in fume cupboards or other suitably ventilated areas. Gloves must be worn. Care should also be taken with the use of PVA glue.

4.4.5.3.9 Pottery and ceramics

Glazes, frits and pigments containing lead, arsenic, cadmium, chromium, mercury and manganese are not to be used in schools. Neither teachers nor students should handle clay in dry form. However, if this is unavoidable dust masks are to be worn. Dust masks must conform to AS 1716.

4.4.5.3.10 Plastics

Plastics are liable to give off hazardous fumes when heated. Foam plastic should not be cut with a hot wire. Students should not use polyurethane except under close supervision.

4.4.5.3.11 Scrap materials

Some scrap materials used in art/craft work may present health hazards. All materials should be clean. Fabric brought by students may need to be

laundered before use. Materials that have been exposed to infection or contamination (including toilet roll tubes) should not be used.

4.4.5.3.12 Ventilation

The ventilation of art/craft rooms, ovens and kilns should be as efficient as possible and rooms need to be kept clean. Protective clothing should be worn and adequate washing facilities should be provided. Students who are small in stature and body size are especially susceptible to hazards.

Many materials are potentially damaging to health, mainly through inhalation but also through skin absorption. When implementing risk management processes for identifying and controlling hazards and risks, principals and heads of departments should take careful note of the following warnings.

Resources

For further information about safety in the:

- arts classroom: see the Student Safety Guidelines—Technology
- dance classroom: Ausdance Victoria provides advice to teachers in an information kit on safe practices in the dance classroom. Ausdance may be contacted on telephone 9686 0099 or email Victoria@ausdance.org.au
- drama classroom: see the Drama Australia publication, *Drama Australia Working Conditions Policy*, available at www.dramavictoria.vic.edu.au
- visual arts classroom: see the following Art Education Victoria publications:
 - Chemicals and the Arts, a health and safety handbook for students, teachers and art workers, Bob Hall, 1997
 - The Artful Dodger, Are you an endangered species.

Art Education Victoria may be contacted on telephone 9349 5188, or email

enquiries@aev.vic.edu.au

4.4.5.4 Physical and sport education

The nature of physical and sport education activities means that principals and teachers must ensure that appropriate precautions and safety measures are taken to minimise any potential risk to students. Such precautions and safety measures will include risk management processes for identifying and controlling hazards and risks (see 6.14.1) as well as relevant training in first-aid for the teachers involved (see 4.5.1.1).

In addition to the specific safety requirements and guidelines provided by the Department of Education and Early Childhood Development, principals and teachers are advised to refer to relevant references and associations/organisations to ensure that each activity is conducted within currently accepted guidelines.

While teachers of physical and sport education usually have appropriate qualifications/expertise, other teachers and adults who assist with sport education programs may wish to undertake additional, specialised training.

The Department's PHASE coaching courses offered through the [Australian Council for Health, Physical Education and Recreation \(ACHPER\)](#), (membership login required), and coaching certificates offered through the National Coaching Accreditation Scheme are suitable courses for teachers and others involved with sport education programs.

4.4.5.4.1 Mouthguards

The National Health and Medical Research Council has advised that dental injuries are the most common type of facial injury sustained during participation in contact sports. The majority of these injuries can be prevented if an individually fitted mouthguard is worn.

While the wearing of a mouthguard may prevent or reduce the severity of dental injuries, principals and teachers need to review their practices so that the likelihood of such injuries occurring is minimised. For example, students must not be permitted to throw the bat after hitting the ball when playing T-ball, softball or baseball, and the students on the 'bench' must be kept well away from the first and third base lines.

The three types of mouthguards available are:

- individually fitted mouthguard. This is available through a dentist and is custom made
- semi-adaptable mouthguard. This is sold over the counter and is adaptable in the mouth after warming
- standard mouthguard. This is sold ready-made over the counter.

Although there are the three types of mouthguards available, the individually fitted mouthguard provides the maximum protection. To be effective, mouthguards should fit properly and have sufficient retention to prevent dislodgement by an impacting force. Mouthguards can be made to allow for missing and erupting teeth, and to fit over orthodontic wires. An ill-fitting mouthguard has the potential to cause injury. A mouthguard that has to be held in place by clenching the teeth is unsatisfactory. Yearly replacement may be needed for younger students to allow for growth and development.

Given their personal nature, schools are not expected to provide mouthguards for student or staff use. Principals should advise parents of the benefits of their child wearing a mouthguard when participating in physical activities. Principals should also suggest to parents that they provide their child with an appropriate mouthguard particularly when their child is competing in the following contact sports: football (all codes), basketball, hockey, lacrosse and martial arts. The mouthguard should be worn during formal training sessions.

Where parents notify the school that they have provided their child with a mouthguard, teachers should take reasonable steps to ensure that the mouthguard is worn when the child is participating in contact sports.

Further information about mouthguards can be obtained from the Australian Dental Association, Victorian Branch, telephone 9826 8318.

4.4.5.4.2 Physical and sport education equipment

It is the responsibility of the principal and teachers to ensure that all items of equipment are safe to use. Both fixed and mobile equipment should be regularly inspected and the necessary repairs and maintenance undertaken.

Basketball

Students and other users of basketball facilities in schools should not be permitted to swing from basketball rings at any time (except in the rare circumstance of preventing injury to themselves or another person).

To ensure that all users of the school's basketball facilities (both during and outside of school hours) are aware of this policy, schools may wish to place signs on the backboards highlighting the danger of swinging and prohibiting the practice.

The Fair Trading (Safety Standard) (Basketball Rings and Backboards) Regulations 2002 came into operation on 9 July 2002. These regulations require suppliers of basketball rings and backboards to place large labels warning about the dangers of improper use or installation of their products. From 9 July 2002 it is illegal in Victoria for basketball rings and backboards that do not comply with these regulations to be supplied.

Also, portable basketball rings/netball rings are subject to the same safety requirements as permanent basketball rings/netball rings. Portable basketball rings/netball rings, and any relevant fittings such as sockets for indoor rings, need to be thoroughly checked for safety prior to use and students must be instructed that swinging on such rings is not permitted.

Principals should ensure that basketball towers, backboards and rings are incorporated into the school's regular facilities and equipment inspections and that appropriate maintenance is undertaken as required. Details of inspections and maintenance need to be recorded and retained at the school.

4.4.5.4.3 High jump

High jumping should only be permitted where teachers or instructors are experienced in high jump instruction or have appropriate qualifications.

The Fosbury Flop technique can be used if the teacher or instructor is experienced in teaching this technique and the students have developed the necessary preliminary skills for the run-up, take-off, flight and landing phases of the jump.

Foam practice-bars or round fibreglass bars are recommended. Triangular aluminium bars must not be used.

Block mats are to be used. As the mat thickness required is dependent on the weight of the jumper, the height being attempted and the type of surface on which the landing mat is positioned, manufacturers should be consulted about the relevant specifications.

It is recommended that gym mats be used to surround block mats, thereby adding to the safety of the jumper. All mats should be inspected regularly to ensure that they are in a safe condition.

4.4.5.4.4 *Baseball, softball, cricket*

Catchers

A body protector, shin protectors, face mask, and throat protector should be worn. When a hard ball is used, it is recommended that male students wear a genital protector (box).

Batters

When a hard ball is used a double eared helmet should be worn and should remain on when the batter is running between bases. It is recommended that male students wear a genital protector (box).

Wicket keepers

When a hard ball is used, a helmet and face mask should be worn. When a hard ball is used, it is recommended that male students wear a genital protector (box).

4.4.5.4.5 *Rugby*

Where rugby is played as part of the physical education or sport program, or in the playground outside of the scheduled teaching program, students with long, thin necks must not play in the front or second row of scrums. A subjective assessment of all players will need to be made as to whether or not they have the physique to play in the front or second row of the scrum. If there is any doubt in a teacher's mind concerning the appropriateness of students' physiques, the students must not be permitted to play in these positions.

Specific neck strengthening exercises should form part of the training program for all students participating in rugby.

Mouthguards should be worn when training and playing rugby. Students should also wear appropriate head protection when training and playing rugby.

Where rugby is included in a school's program, parents/guardians must be provided with adequate information on the nature of the activity and the potential risks. Parents/guardians may withhold permission for their children to participate.

4.4.5.4.6 *Martial arts*

If martial arts is included in teaching programs only accredited martial arts instructor must be accredited. An instructor is recognized as accredited if the instructor is:

- accredited with the National Coaching Accreditation Scheme (administered by the Australian Sports Commission) or
- accredited with the National Martial Arts Instructors Accreditation Scheme (administered by the MAIA) or

- accredited with the Australian National Training Authority and is so qualified as a trainer under the Vocational Education and Training Accreditation Act 1990 and
- carries appropriate levels of public liability and professional indemnity insurance.

Where school facilities are to be used by community groups or individuals who will be providing instruction in martial arts, school councils may wish to draw their attention to the above instructor requirements.

School councils should also determine whether those who hire school facilities, such as martial arts program providers, should be required to have a satisfactory policy record check. In some instances the employing body takes responsibility for its staff. Others would have their police record checked in the same manner as Department staff.

Information on the Martial Arts Industry Association (MAIA) can be obtained from www.maia.com.au or telephone 1300 654 118

4.4.5.4.7 Weight training

Primary students are not to participate in weight training and weight lifting.

Secondary students may participate in these activities provided they are supervised by a qualified physical education teacher who has specialised knowledge in this field.

4.4.5.4.8 School sports

Interschool sport is regarded as an excursion and therefore must be approved by the principal. As with all excursions, provisions must be made for the continuous instruction of students who remain at the school.

In circumstances where a small group of students represents the school at a sporting event, the principal should make every effort to provide a teacher to accompany and supervise the students (see [4.4.2.6](#)).

Private cars driven by parents/guardians or the teacher may be used to transport the students. However, the supervising teacher must travel at the same time as the students and be at the venue to supervise the students as they arrive (see [4.4.2.10](#)).

Where arrangements cannot be made for a staff member to accompany the students, the excursion cannot go ahead as an official school activity. Parents/guardians of the students may, however, be prepared to make private arrangements to take their children to these sporting activities and to provide supervision for them while they are in attendance.

4.4.5.4.9 Starting pistols

Cap starting pistols and electronic devices are to be used. Operators of starting pistols should wear ear muffs or plugs approved to AS 1270, with a SLC 80 rating of at least twenty-five.

Except for competitors, others present should be at least 10m away from the starter or should also wear hearing protection.

4.4.5.4.10 Gymnastics

In the conduct of a gymnastics programs, principals should ensure that teachers have the appropriate competencies to teach the skills and activities that are undertaken as part of the program.

It is essential that activities selected are appropriate for the students' age and ability. All activities require adequate preparation and instruction to ensure students are physically ready to perform skills. This includes appropriate lead up and prerequisite developmental skill progressions and drills. It is essential that practice of these is provided for all students.

Gymnastics Victoria advises that recommended activities for gymnastics programs in schools are:

- acrobatics
- basic tumbling
- hand apparatus
- circuits—fitness and skill development
- group performances
- non-inverted vaulting activities
- aerobics.

The following activities are not recommended for gymnastics programs in schools:

- somersaults
- bridges
- headstands
- hockswings
- neck rotations
- sideways landings from a height
- excessive deep knee bends
- wheelbarrows
- inverted spring activities
- excessive weight-bearing on wrists.

All equipment and apparatus used in the conduct of a gymnastics program must be suitable for the requirements of the activity and for the age and ability of the students. The equipment and apparatus must be safely maintained and set up and prepared appropriately for the activity for which it is being used. See also 4.4.5.4.2 Physical and sport education equipment.

Adequate and safe matting should be used around all equipment at all times.

Crash mats

Where the program activities require the use of crash mats, floor mats should be placed on the floor to the side and behind the crash mat area.

Mini-trampolines

Where the program activities involve the use of a mini-trampoline then the mini-trampoline should have a suitable cover over the springs so that the springs are not exposed.

Schools may take students on excursions to gymnasiums with specialist instructors who have the technical knowledge and skills to instruct the students. However it is the teachers who have the overall responsibility for the safety and welfare of the students. Further advice about the safe conduct of gymnastics programs is available from [Gymnastics Australia](#), telephone 9380 4588, and [Gymnastics Victoria](#), telephone 9214 6020.

4.4.5.4.11 Trampoline sports

Trampoline activities should only be permitted under the strict supervision of teachers or other approved adults, both of whom should complete an accredited coaches' course such as provided by [Gymnastics Australia](#).

At least four 'spotters' who have been instructed in correct spotting techniques are required to guard each side of the trampoline.

Prior to use, each trampoline should be checked for safety (springs, bed, frame and frame pads). A minimum ceiling height of 5m is recommended, with at least 2.5m clear of walls on all sides. At no time should students or any equipment be permitted under the trampoline.

Appropriate clothing should be worn, including socks/gym shoes for safety and hygiene.

Students should only be permitted to climb (never jump) onto and down from the trampoline.

Correct safety measures should be taught, including appropriate progressions for learning skills. Students should be made aware of the risks associated with performing for long periods or at excessive heights.

Only one performer should be permitted on the trampoline at any one time.

Further advice on the safe use of trampolines is available from Gymnastics Australia, telephone 9830 4588.

4.4.5.5 Traffic safety education

The [Administrative Guidelines for Traffic Safety Education](#) 1997 contains comprehensive advice concerning the conduct of traffic safety education activities in Victorian schools, including policy and approval of programs, appropriate teacher training, implementation processes, the delivery of practical instruction to students and the acquisition and care of vehicles.

The guidelines provide advice on:

- passenger safety education
- pedestrian safety education
- bus safety education
- public transport safety education

- bicycle education
- pre-licence education (including pre-driver education and motorcycle safety education).

The practical component of these programs must be conducted by appropriately qualified instructors under the conditions specified in the [Administrative Guidelines for Traffic Safety Education](#) 1997.

NOTE: The Administrative Guidelines for Traffic Safety Education are currently being rewritten and are expected to be available early Term 4, 2009.

4.4.5.5.1 Cycling programs

In addition to the requirements and guidelines in this section (see sections [4.4.7.1](#), [4.4.7.2](#), [4.4.7.3](#)), schools conducting cycling activities should refer to:

- Safety in Outdoor Adventure Activities (1992)

NOTE: New cycling guidelines will be available on the [Safety Guidelines for Education Outdoors](#) website from early Term 4, 2009.

- Traffic Safety Education Teacher Support Materials, provided on <http://www.education.vic.gov.au/studentlearning/programs/traffic/resources.htm>
- Administrative Guidelines for Traffic Safety Education 1997. <http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/student/tseadmingdl.pdf>

While the general requirements and guidelines for excursions (see 4.4.2) and adventure activities (see 4.4.3) apply, the following specific details apply to cycling activities:

- at least one staff member is to be qualified in bicycle education
- all staff involved in cycling programs are to be suitably experienced for the activity and preferably be qualified in bicycle education
- at least two staff are to be present with each group of students
- the minimum overall ratio is to be at least one staff member for every ten students or part thereof
- all cyclists need to wear an approved bicycle helmet (see 4.4.7.1)
- helmets must be fitted and positioned correctly with the chin strap adjusted correctly and secured firmly
- each cyclist should wear a conspicuous vest, a bright top, or have a bright flag attached to the bicycle
- all cyclists should wear closed toe footwear.

Prior to the participation of students in school cycling activities, teachers should ensure that the bicycles are of an appropriate size for each student and in good mechanical condition.

It is recommended that teachers responsible for conducting cycling programs should be qualified in bicycle education through an accredited training course in Bike Ed and/or Cycle On.

Where possible, other adults assisting with such programs should also be similarly qualified.

Accredited training programs for teachers and other school support personnel are provided by the Department's preferred provider(s). Information and contact details for preferred provider(s) of bicycle education instructor training can be obtained at the Traffic Safety Education website at:

<http://www.education.vic.gov.au/studentlearning/programs/traffic/default.htm>

Programs conducted within school grounds, the local environment and on bicycle paths

These activities are regarded as day excursions and as such require the approval of the principal (see [4.4.2.2](#)).

Programs conducted beyond the local environment on open roads and at BMX tracks

These activities are regarded as excursions and as such require the approval of the school council (see [4.4.2.2](#)).

Note: Section [4.4.6.9](#) BMX tracks in school grounds, states that "The Department of Education and Early Childhood Development does not approve the establishment of BMX tracks on school sites."

4.4.5.6 Experimental activities involving students

The following guidelines are designed to assist teachers to:

- identify activities that involve particular risks
- evaluate any risks associated with the activity
- become more aware of legal and ethical issues relating to the participation of students in experimental activities.

Teachers need to consider:

- the physical and emotional health of the student
- the student's privacy
- the student's personal values.

Some examples and activities suggested in textbooks may involve undue risk. Teachers therefore need to critically examine all 'experimental' activities involving student participation and not assume that any suggested activity is appropriate and acceptable simply because it has been published.

Student activities that break the intact surface of skin are not to be undertaken as part of the school curriculum.

Other activities such as cheek cell scraping for microscopic examination and saliva collection for digestion experiments are found in standard biology practical manuals. These activities if properly carried out do not break the skin surface. However, all activities involving human material

(cells and fluids) and animal material should be regarded as potentially infectious and should be treated accordingly.

Some activities involve student participation and data collection about body functions that do not involve breaking the skin or collecting actual material, for example, the effects of vigorous exercise on heart and breathing rates. Care must be taken to ensure that these types of activities do not cause undue stress, either physiological or emotional, for certain students.

Human foetal tissue, whole foetuses, skeletons or skulls are not to be used or displayed in schools.

Whenever animals are dissected, there are potential risks of infection while working with such material and afterwards if it is not disposed of properly (see [4.4.5.1.1](#) for disposal of animal tissues).

Teachers need to be aware that some students may feel strongly about dissecting animals, and that it may infringe their personal and cultural values.

Students may be asked to collect data about their out-of-school life, for example, to list all the drugs in the home or to ask personal questions of other people. Such surveys can place undue pressure on students and therefore the design of survey activities that requires students to give personal or health information will need to incorporate privacy considerations and should be approved by the principal.

Teachers should also be conscious of issues related to the disclosure of personal information. When organising activities such as family history projects, alternative projects should be offered to give students and their families an option that does not involve disclosing personal information.

Students and parents/guardians have a right to privacy and confidentiality. Teachers should be sensitive to other family structures and not presume that all students come from a nuclear family. For further details about information privacy see section 6.28.

The tasting, preparation and handling of certain foods (for example, meats, drinks containing caffeine) may be unacceptable to some students for religious, cultural or medical reasons.

4.4.5.7 Animals in schools

Teachers and students using animals in schools are subject to the provisions of the following acts and regulations:

- *Prevention of Cruelty to Animals Act 1986* and its regulations of 1997
- Australian Code of Practice for the Care and Use of Animals for Scientific Purposes
- Code of Practice for the Housing and Care of Laboratory Mice, Rats, Guinea Pigs and Rabbits
- *Wildlife Act 1975* and its regulations of 2002
- *Environment Protection Act 1970*, as amended.

4.4.5.7.1 Use of animals

The Victorian Schools Animal Ethics Committee (VSAEC) has been established to help all Victorian schools comply with relevant legislation in the responsible care for animals used in teaching. VSAEC has responsibility for determining what activities involving the use of animals are permissible in schools and in determining these activities; it is guided by the principles of **replacement**, **reduction** and **refinement**. Schools are also required to go through the process of deciding whether the use of animals is justified when applying for approval to use animals in teaching.

Animals are not to be used for teaching purposes unless there are no suitable alternatives for teaching all of the educational objectives. Techniques that totally or partially replace the use of animals are to be sought and used wherever possible. When using animals, invertebrates rather than vertebrates are to be preferred, where possible. However, all animals should be treated with respect and consideration for their welfare. When animals are held captive and used for observation and simple behavioural studies, the number should be kept to a minimum.

The school principal is responsible for ensuring that school activities involving animals comply with relevant codes. Teachers have personal responsibility for all matters related to the welfare of animals they use and are to act in accordance with the requirements of the relevant codes.

4.4.5.7.2 Animal care and welfare

Schools must have approval from VSAEC before animals are used in teaching and must maintain records of their care and use. Sample forms can be found at

www.education.vic.gov.au/management/schooloperations/animalcare

VSAEC conducts annual inspections of schools using animals for teaching. Schools must ensure they maintain records of the care and use of animals as these records are requested during inspections.

Teachers should be aware that when using animals in scientific activities, individual animals must not be used in more than one scientific activity, either in the same or different projects, without approval from VSAEC.

If the appropriate level of care and welfare cannot be provided, animals should not be kept in schools. The question of weekend and holiday care is a sensitive community issue and adequate provision must be made.

Normally, students should not be permitted to take animals home. However, if there is no other suitable alternative, it may be allowed after discussion with parents/guardians and with their written agreement.

4.4.5.7.3 Euthanasia and disposal

The *Environment Protection Act 1970* is of relevance in the disposal of waste (animal droppings or carcasses). Contact should be made with the local municipal council for disposal locations.

Students occasionally bring sick, injured and orphaned animals from the wild to school. It is essential that teachers recognise that normally a veterinary practitioner should treat and, when necessary, dispose of vertebrate animals. If veterinary assistance cannot be obtained, advice should be sought from the RSPCA.

Humane euthanasia requires the skilled application of the most appropriate technique for the animal concerned.

The type of animal and its age and size are relevant in the choice of method. Only skilled and experienced teachers should consider using euthanasia, and even then only after discussion with a veterinary practitioner and if veterinary attendance is not possible.

When an animal dies unexpectedly, or is euthanased due to unforeseen complications, this should be reported promptly to VSAEC.

For information on the disposal of carcasses see section 4.4.5.1.1 'Biological materials' – for procedures on disposal of animal tissue.

4.4.5.7.4 Communicable diseases

It should be noted that a variety of diseases are communicable between animals and humans. Care must be taken to prevent the spread of disease. At all times personal hygiene is of utmost importance. Animals should be handled as little as possible so as to avoid injuries to the animals and their handlers.

4.4.5.7.5 Farm animals

Acts, guidelines and codes of practice relating to farm animals are available on the Department of Primary Industries website at:

www.dpi.vic.gov.au (select Agriculture & Food, then Animals and Livestock, then Animal Welfare).

4.4.5.7.6 Animals in the laboratory

Schools must ensure they have a Scientific Procedures Premises Licence before using animals for scientific procedures. Schools that use guinea pigs, rats, mice or rabbits in their scientific procedures must not cause or allow these animals to be bred on the premises without a Specified Animals Breeding Licence.

Teachers using animals in the laboratory need to be familiar with relevant codes and regulations:

- *Australian Code of Practice for the Care and Use of Animals for Scientific Procedures*: (parts are relevant to schools, e.g. housing, handling and transportation, euthanasia of animals)

<http://nhmrc.gov.au/publications/synopses/ea16syn.htm>

Code of Practice for the Housing and Care of Laboratory Mice, Rats, Guinea Pigs and Rabbits

www.dpi.vic.gov.au

Schools are also required to maintain appropriate record keeping and recording of animal activity.

4.4.5.7.7 Wildlife

Teachers and students wishing to study wild animals, or remove them from their habitat, need to be familiar with relevant acts and regulations. For example, a permit is needed to keep certain wild animals in captivity and in some situations restrictions apply to removal of animals from their natural environment and to disturbance of the habitat of wild animals. Teachers should seek advice from the Department of Primary Industries.

Wildlife permits

All use of wildlife is subject to the provisions of the *Wildlife Act 1975* and the *Wildlife Regulations 2002*.

The Department of Education and Early Childhood Development has obtained a general authorisation from the Department of Sustainability and Environment for Victorian government schools to keep certain specified wildlife for educational purposes.

This authorisation allows the principal (and up to two nominees) to acquire, and retain on school premises, for the purposes of education (excluding the conduct of experiments other than those involving non-invasive observations) and to sell or otherwise dispose of a range of amphibians, reptiles and birds.

The conditions that apply to this general authorisation are available at:

www.dse.vic.gov.au/dse/index.htm under the headings 'Plants & Animals', then 'Forms' and then "General School Authorisation Government Schools'. A list of the wildlife permitted to be kept is included as an attachment to this form.

Permits are required for the retention and display of dead wildlife at schools. There is no justification for keeping live venomous animals.

When dealing with marine animals, including invertebrates in the intertidal area, schools must check the regulations for the relevant locality. See the Department of Primary Industries website at:

www.dpi.vic.gov.au/ (select Fishing and Aquaculture).

4.4.6 Safety in the school

The size of schools and the nature of the activities held within them mean that it is essential for potential risks and hazards to be identified and measures taken to minimise risks to students, staff and visitors.

School councils and principals therefore have a responsibility to implement appropriate risk identification and management processes.

The following requirements and guidelines need to be noted by schools when identifying such risks and management procedures.

4.4.6.1 Electrical equipment

Electrical equipment is potentially lethal if mishandled or tampered with by unqualified persons.

The removal of protective covers may cause safety hazards and should only be done by qualified technicians.

Teachers are to ensure that all mains-operated equipment (240 V, 50 Hz) is properly connected and correctly operated. Malfunctions must be promptly corrected by a qualified electrician.

Radiant heaters with exposed elements (whether oil, gas or electric) should not generally be used in schools. Where there is some compelling reason for using this type of equipment, it must be mounted out of reach, permanently connected to services, and in areas where a heat source will not ignite nearby materials or gases.

Electrical Safety Standard: AS/NZS 3760:2003 requires that all electrical equipment is tested prior to initial use as well as after servicing and repairs, and periodically from then on.

When new equipment is initially purchased, the supplier is deemed responsible for the initial electrical safety of the new equipment and thus, it does not have to be tested. However, new equipment shall be inspected and fitted with a tag marked with the date it went in to service. Fixed items not subject to constant flexing, such as desktop computer equipment, are to be tested every five years after initial testing. Movable objects (non-cordless), e.g. drills and leads, are to be tested every twelve months.

Notebook computers that are used at home by teachers also need to be tested after servicing and maintenance and then every twelve months. This can be done at school when other testing is occurring.

A recording system with dates and results of testing must be in place. Items are to be tagged at time of testing. Tags are to be made of a non-metallic and durable material and be non-reusable. They should contain the date of testing and the name of the person or company that did the testing. Tags are readily available from safety equipment suppliers.

The standard does not require the employment of an electrician to test all electrical equipment. WorkSafe Victoria considers that electrical items, apart from safety switches, also called residual current devices (RCDs) can be tested by a competent person. Given that the testing of safety switches requires considerable electrical knowledge, this procedure must be carried out by an 'A' grade electrician.

A competent person is one who 'the person in charge of the premises ensures that he or she has acquired through training, qualification, experience or a combination of these, the knowledge and skill enabling that person to perform the task that is required correctly'. Consequently, this person can be an 'A' grade electrician or a person trained specifically for the task of electrical safety testing.

Further information regarding compliance with the standard can be obtained from the Department's Occupational Health and Safety Unit, telephone 9637 2385.

4.4.6.2 Poisons

A Poisons Information Centre exists at the Royal Children's Hospital on telephone 13 11 26. The service is available twenty-four hours a day. The centre can advise on poisons and poisoning by all types of medicines, household, gardening and home maintenance products as well as agricultural, industrial and swimming pool chemicals. Advice is also available on food poisoning, toxic and non-toxic plants, stings and bites from winged, crawling and swimming creatures. Further information is available at:

<http://www.eduweb.vic.gov.au/hrweb/ohs/accp/hazsubs.htm>

4.4.6.3 Insecticides and herbicides

These preparations are formulated to control/kill living things and because of this they represent a risk if applied carelessly or misused. They are classified as hazardous substances under the Occupational Health and Safety Regulations 2007.

Part 4.1 of the OHS Regulations 2007 aims to protect people at work against risks to their health associated with the use of hazardous substances. It places specific requirements on schools with respect to keeping a register of hazardous substances, obtaining material safety data sheets, documenting identified hazards and risk controls, labelling containers and providing information and training to staff. See:

<http://www.eduweb.vic.gov.au/hrweb/ohs/accp/hazsubs.htm>

4.4.6.3.1 Label directions

The label on any scheduled substance, including pesticides, is a legal document that must be followed. Label information includes the uses to which the preparation may be put, restrictions on use, safety directions and first aid information.

4.4.6.3.2 Material safety data sheets

A material safety data sheet is a supplementary information source that must be supplied with all hazardous substances. This provides information about a substance's properties, ingredients, hazards, precautions for use, first aid advice and contacts for further information. The material safety data sheet must always be available and the information used to supplement the label. Schools must obtain a current material safety data sheet (i.e. issued within the last 5 years) for all insecticides and herbicides. These substances should be included in the schools hazardous substances register.

4.4.6.3.3 Insecticides, plants and pest control

It is usually impossible to achieve a natural balance between pests and their natural controls (predators, diseases) in a disturbed environment such as a school. Therefore, it will at times be necessary to use pesticides when other measures (hand removal or water jets) fail.

However, some insecticides can be harmful to the environment if they are misused. If this occurs these pesticides can affect other animals such as spiders and birds and may even be responsible for the appearance of pests not previously considered a problem. Therefore, insecticides should only be used in accordance with the label and the pest to be controlled should be clearly identified to ensure correct control measures.

Schools should only use appropriately registered pesticides. See:

<http://www.apvma.gov.au/users/downloads/schools.pdf>

Where considered necessary, the following insecticides may be used in schools:

- pyrethroids—these are obtained from the dried flowers of some chrysanthemum species and are effective against a wide range of insects, including aphids, caterpillars and bugs. Pyrethroids are plant products and may cause allergic reactions
- synthetic pyrethroids are man-made analogs of natural pyrethroids and are designed for longer life or improved control. All registered synthetic pyrethroids are safe if used according to the label
- garlic spray—this may be applied with a mild detergent and may be effective against caterpillars and sucking insects
- white oil—this is useful against scale, mealy bugs and aphids. It can sometimes be mixed with pyrethroids and synthetic pyrethroids to increase its effectiveness against a wide range of pests. Check the labels on the formulations to determine whether this can be done
- derris (Rotenone)—this is an insecticide extracted from the roots of derris. As it is a stomach poison, it is effective against chewing pests
- soap flakes spray—this is occasionally useful in the control of some caterpillars and other larvae.

Any pesticides registered for use in domestic premises can be safely used in schools provided the label directions are adhered to. Some pesticides are best left to licenced pest control technicians, e.g. termiticides.

School councils should arrange to have any necessary pest control works undertaken during weekends or school vacations.

4.4.6.3.4 Herbicides and weed control

Herbicides should be selected to give appropriate control for particular situations, for example, to completely clear all ground cover with or without sterilising the soil (that is, to prevent or allow new plant growth) or to control weeds in cultivated areas such as playing fields.

Herbicides are safe to use providing the label directions are followed and precautions taken.

Schools should only use registered herbicides appropriate for the weeds requiring control.

For restricted non-schedule 7 agricultural chemicals, see:

www.dpi.vic.gov.au

Herbicides containing glyphosphate as the active ingredient (e.g. Roundup and Zero) tend to be biodegradable and non-persistent but toxicity varies with the formulation.

The following herbicides can only be used by licensed persons and should only be applied in school grounds or camp sites by such persons: 2; 4-D; Paraquat; and Diquat.

The following precautions are to be observed when handling insecticides or herbicides:

- The operator should ensure that herbicide sprays do not drift onto non-target areas and cause unwanted defoliation or health problems.
- All herbicides and insecticides must be stored in a secure place and made inaccessible to students and all other unauthorised persons.
- Spraying should only take place outside school hours, preferably after school on Fridays, to protect students and staff from unnecessary exposure.
- Trained operators should always be used. The operator should always wear the safety equipment recommended on the label of the container and should use well-maintained equipment appropriate to the particular situation.
- Generally, insecticides and herbicides should not be applied from the same spray unit unless it is thoroughly rinsed between applications to avoid contamination.
- Spraying should be avoided on windy days. If a light breeze develops, the spray operators should ensure that spraying is performed in a direction such that any drift is carried away from them or any neighbouring properties.
- Special care must be taken when spraying near ponds, fish tanks and so on as fish are particularly susceptible to many pesticides.

- If there is accidental contamination, clothing should be changed promptly and the skin washed (without scrubbing) with soap and water. The directions on the label should be followed. This might include getting to a doctor or hospital quickly.
- In case of accidental poisoning, telephone the Poisons Information Centre at the Royal Children's Hospital. Information should be provided on the poison, the length of time of the exposure plus any signs and symptoms.

For information on termiticides, see *Protocol for Use of Termiticides in Schools 2001*, available on the Human Resources website at:

<http://www.eduweb.vic.gov.au/edulibrary/public/ohs/Termiticides.pdf>

The Occupational Health and Safety Regulations 2007 can be purchased from Information Victoria, 356 Collins Street, Melbourne 3000, telephone 1300 366 356, or can be downloaded from the website at:

<http://www.dms.dpc.vic.gov.au>

The associated Code of Practice for Hazardous Substances is available at no cost from your local Victorian WorkCover Authority Office or can be downloaded from their website at:

<http://www.workcover.vic.gov.au>

4.4.6.4 Dangerous goods

Immediate contact should be made with the police if any of the following substances are found on school premises: explosives, detonators, cords & fuses, blasting cartridges, fog signals, incendiary devices, marine distress signals, gun powder and propellant powders.

Unless it is unavoidable, explosives should not be handled but left where found. If it is necessary to remove explosives from a student's possession, this should be done in such a way as to avoid bumping, striking or dropping the object that should then be placed gently in an isolated position to await the arrival of the police. Explosives should never be exposed to heat or any other form of ignition.

In the event of a bomb threat, there must be no attempt to initiate or permit a search by students or staff. The police should be called immediately, the Department's Emergency and Security Management Unit notified by telephoning 9589 6266, and the school's emergency management plan implemented.

Note: Explosives inspectors are not to be impeded, prevented or obstructed from entering school premises. Students may be interviewed at school by an inspector of explosives on the same basis as police interviews are permitted (see 4.6.12.1 and 4.6.12.2).

See also section 4.4.5.1.2 for information concerning explosives and safety in the curriculum.

www.workcover.vic.gov.au

4.4.6.5 Fireworks

Fireworks or pyrotechnical displays are governed by the Dangerous Goods (Explosives) Regulations 2000. Any school wishing to use fireworks must engage a licensed pyrotechnician. Pyrotechnicians are required to observe strict procedures in relation to the installation, control and discharge of fireworks. These measures are designed to protect the safety of spectators. The WorkCover Authority issues pyrotechnical licences. In order to grant such a licence the Authority must be satisfied that the applicant has undertaken approved training and demonstrates suitable practical experience.

The pyrotechnician in charge of a fireworks display must ensure that:

- fire protection and suitable means of firefighting are provided
- spectators are controlled, by barriers if necessary, and kept at a safe distance from the fireworks discharge point
- security is provided against unauthorised access to the discharge point or storage area
- a search of the display site for unfired fireworks is conducted at the end of the display.

To obtain a copy of an information sheet on 'Using Fireworks' contact Victorian WorkCover Authority, Preston Branch, on telephone 9485 4555.

4.4.6.6 Amusement rides and structures

School councils need to be aware that the use of amusement structures and rides in schools for fetes, picnics or other similar activities is covered by the following relevant legislation:

- Equipment (Public Safety) Act 1994
- Equipment (Public Safety) Regulations 2007
- Occupational Health and Safety Act 2004
- Occupational Health and Safety Regulations 2007, Part 3.5 - Plant.

This legislation applies to anybody who supplies, owns, employs others to operate, or operates amusement rides and structures themselves, in all workplaces and non-workplaces in Victoria.

The school council, in hiring such amusement rides and structures, should obtain the following information from the supplier:

- the class and the plant registration number of the amusement structure. (Note: Amusement structure classes arise from AS 3533—Amusement Rides and Devices Code. Class 1 is not registrable and hence has no registration, whereas Class 2 must have registration.)

- the hazard identification, risk assessment and control of risks measures that have been carried out in relation to the design and manufacture of the plant under the control of the supplier. (Note: If it is not practicable for the supplier to provide the above information, the supplier must be able to ensure that the risk arising from the use of the plant is either eliminated or reduced so far as is practicable.)
- the inspections and maintenance that have occurred on the plant between hirings and leasings, and the records of inspections and maintenance that exist
- any other information regarding the safe use of the plant that can be provided by the supplier.
- the supplier must produce evidence prior to the supply, of Public Liability Insurance in an amount of not less than \$10 million for any one event. The evidence must show that the insurance is current, that the insurance covers the ride or activity being supplied and note the Department of Education and Early Childhood Development.

4.4.6.7 Playground equipment

Only playground equipment items, which are in accordance with the relevant Australian Standards, may be erected in school grounds. A full list of approved equipment items would be impractical, but for general guidance, the following have been approved:

- sandpits
- slides
- horizontal and vertical ladders
- horizontal bars
- gymnastic combinations
- jungle gymnasiums
- climbing nets and frames
- climbing ropes (fixed)
- track glides.

All playground equipment design and installation should conform to the following standards—AS 1924 parts 1 and 2, AS 1428 parts 1–4:1992, AS/NZS 4422 and AS/NZS 4486.1:1997.

Copies of standards can be obtained from Standards Australia, 19–25 Raglan Street, South Melbourne 3205, telephone 9693 3555.

The following items of playground equipment are not approved for use in schools:

- seesaws
- swings (including log swings)
- maypoles (including climbing poles)
- merry-go-rounds
- roundabouts
- flying foxes (see [4.4.7.4](#)).

All apparatus must be fixed unless specifically designed to be portable, for example, A frames.

Concrete footings of the playground equipment should be set with the tops of the footings at least 20 cm below ground level and backfilled.

Impact absorbing surfacing, the soft ground surface required within the fall zone of the playground equipment, should be provided to an average compacted depth of 25 cm and maintained in a loose condition.

Current Australian Standards determine that playground equipment should not be more than 6 metres above ground level, with a fall height of not more than 2.5 metres. The equipment must be at least 2.5 metres away from any fences, buildings or other similar objects on which children could fall. There should be at least 2.5 metres between items of equipment.

It is recommended that suppliers provide written confirmation that the playground equipment and its installation meet the requirements of the Australian Standards and the above specifications.

All playground equipment should be inspected weekly and repairs and maintenance acted upon in accordance with the school's maintenance provision. Particular attention needs to be given to the under-surfacing beneath and around the playground equipment.

It should be noted that there will be a new standard for playground equipment in 2003. Until then current standards are to be followed.

Schools are reminded that any accidents or injuries must be reported (see [4.4.1.1](#)).

Information and advice on playground equipment design and construction is available from the Playgrounds and Recreation Association of Victoria, telephone 9412 4013, fax 9412 4019, email at prav@netspace.net.au, or the Internet at:

www.prav.asn.au

4.4.6.8 Marking sports grounds

Hydrated lime or 'lime', (calcium hydroxide) should never be used for line marking. It is toxic and can give rise to chemical skin burns and irritations and can burn the eyes and skin on contact in its dry or wet form.

There are whitening powders (other names used include: 'English whitening', 'line marking powder') available from sporting goods suppliers that are non-toxic, are based on ground natural calcium carbonate, can be used wet or dry and are safe to use."

4.4.6.9 BMX tracks in school grounds

The Department of Education and Early Childhood Development does not approve the establishment of BMX tracks on school sites.

4.4.6.10 Helicopter landings in schools

The Department of Education and Early Childhood Development has given a general authorisation for the use of school grounds as helicopter

landing sites during emergencies for the air ambulance, fire reconnaissance and crime prevention.

Where practicable, the relevant emergency service will contact the school requesting use of the school grounds. However, the urgent nature of an emergency may preclude such advance contact.

The pilot is responsible for ensuring that the area chosen for landing is suitable and that the safety of those on the ground will not be compromised by such operations.

If a landing is to occur during school time, students must remain at a safe distance and clear of the departure and approach paths.

Media and other commercially or privately operated helicopters have not been given approval from the Department of Education and Early Childhood Development to use school grounds. They must obtain permission from the principal before landing on school grounds.

Principals or school councils contemplating helicopter arrivals and departures from the school grounds should note that there are stringent requirements for helicopter landing sites, safety of spectators and the protection of the environment. It is therefore advisable for contact to be made with the Aviation Branch of the [Commonwealth Department of Transport and Regional Services](#) and the [State Environment Protection Authority](#) prior to granting permission.

4.4.6.11 Food safety in schools and food handling regulations

All food premises, including schools, must demonstrate that food is safe to eat in accordance with the *Victorian Food Act 1984* (amended in 1997).

Under the current provisions of the Food Act, registered food businesses must prepare and lodge a food safety program with the relevant municipal council at the time of registration and re-registration. In Victoria, all food businesses are now classed as either Class 1 or Class 2 food premises.

The requirements for each are different:

- Class 1 food premises must prepare a private food safety program and have it independently audited each year.
- Class 2 food premises must prepare a food safety program based on a template.

School canteens are regarded as Class 2 food premises.

A template food safety program can be found in the Department of Human Services' *Generic Food Safety Program* which can be either purchased from the Information Victoria Bookshop, 356 Collins Street, Melbourne 3000, telephone 1300 366 356, at a cost of \$25 (plus postage), or accessed via the Internet at:

www.foodsmart.vic.gov.au

If accessed through the Internet the completed document could then be electronically sent to the relevant municipal council.

In line with the template food safety program, a food safety supervisor is also required for all premises that prepare or serve food. The food safety supervisor must have the appropriate level of training, skills and knowledge to ensure that all regulations are followed and that anyone handling food has the appropriate level of training.

In 1999 the Department of Human Services published the *Guidelines for Food Safety in Schools* and copies were distributed to schools. At the time that it was published it was possible to complete the Model Food Safety Program as set out on page 13. **This is no longer appropriate.** The information from pages 13–16 is no longer relevant. However, the information on good hygiene practices is still quite relevant.

The following is a summary of the recommended practices that will assist schools to ensure that food safety and food handling regulations are met.

4.4.6.11.1 Personal hygiene practices

Good personal hygiene is essential to ensure that food is not contaminated with food-poisoning bacteria or other matter such as foreign objects or chemicals. Hands and other parts of the body can transfer food-poisoning bacteria to food. Every time anyone is to handle food they must maintain a high standard of personal hygiene and cleanliness. Hair, jewellery and clothing can also contain and spread bacteria, as can food handlers who are ill or those with wounds or infections.

The main principals for good personal hygiene practices include:

- hand washing—always wash hands thoroughly with soap and warm water before handling food and after visiting the toilet, coughing or sneezing, handling garbage, touching hair or other body parts or any other activity that may carry bacteria to food
- personal cleanliness—when handling food tie long hair back or cover it, wear limited jewellery, wear clean protective clothing over normal clothing and store personal items and spare clothes away from any areas involving food handling
- personal behaviour—do not smoke, chew gum or undertake any other unhygienic practice in food handling areas
- illness and injuries—all wounds or cuts on hands or arms are to be completely covered with brightly coloured wound strip or bandage. If the wound is on the hands, disposable gloves must be worn over the top of the wound strip. Both the wound strip and gloves must be changed regularly. If someone is suffering from diseases, which are likely to be transmitted through food, they are not to handle food.

4.4.6.11.2 Food preparation practices

Food naturally contains bacteria and some food may contain food poisoning bacteria. Foods need to be handled correctly to ensure that they do not become contaminated and that the bacteria already in the food do not have an opportunity to grow.

If raw food is cooked thoroughly most of these bacteria will be killed. However, if raw food comes into contact with other food that has already been cooked, or is ready-to-eat, the bacteria can transfer to this food. This is called cross-contamination.

For this reason, it is important to keep raw food totally separate from cooked or ready-to-eat foods.

Important considerations need to be taken in the following areas:

- receiving food—where perishable foods are supplied, ensure that they are being transported in a refrigerated food vehicle or refrigerated containers and check the temperature of deliveries. Deliveries of dry goods such as bread and cans should also be checked for unbroken packaging as damage may mean the contents may not be suitable for consumption
- preparing food—use separate utensils, chopping boards and other equipment for raw and ready-to-eat foods to avoid cross-contamination. If this is not possible, thoroughly wash and sanitise equipment between use. Thoroughly wash all fruit and vegetables before use. Do not use any food that you cannot guarantee their freshness
- handling food—raw foods, which are to be cooked, can be safely handled with bare hands provided hands are clean. Cooked or ready-to-eat foods should be handled with utensils such as tongs, spoons, spatulas or disposable gloves. If gloves are worn, they must be changed at least hourly or sooner if they become torn or if there is a change in task. Always wash hands before putting on gloves. Always put on new gloves when changing from raw food to ready-to-eat food. Never touch food with gloves that have been used for cleaning
- cooking and heating—thoroughly cook all food, especially those of animal origin. When cooking meat, ensure that the juices run clear. If reheating food, ensure that it is brought to the boil and simmered for at least five minutes. Thaw frozen food before cooking. If the food is to be cooked from a frozen state, take extra care to make sure that the food is cooked right through. When thawing food, do so in the bottom part of the refrigerator. Microwave ovens can be used to thaw food provided that the food is cooked immediately afterwards. Never refreeze food that has been thawed.

4.4.6.11.3 Food storage and display

Food naturally contains bacteria and some food may contain food poisoning bacteria. If food is not stored, displayed or transported correctly, these bacteria can multiply to dangerous levels. One of the most important factors for growth is temperature. The temperature range between 5°C and 60°C is known as the temperature danger zone. 'High risk' foods must spend only the minimum possible time in this zone.

Safety can be maintained by correctly:

- storing food—high risk foods are those foods that contain meat, dairy products and seafood (not including dried food powders in their original packaging, jars, cans and other containers of food which have been processed by heat). These high-risk foods must be temperature controlled. Keep cold food cold—below 5°C. Keep hot food hot—

above 60°C. Check equipment, particularly the operating temperatures of refrigerators and freezers. Buy a thermometer and monitor temperatures. Report malfunctioning equipment to the school principal immediately (or campsite owner if at a camp). Ensure frozen food is kept frozen. Defrost freezers regularly and do not overload them. Cover food with lids, foil or plastic film. Once a can is opened, any remaining food should be transferred to a suitable container and labelled with the date—not stored in the can. Make sure food does not remain in storage too long. Remember the ‘first in–first out’ principle or refer to the use by date where applicable. Chemicals, cleaning equipment and personal belongings must be stored away from food preparation and food storage areas

- displaying food—food that is displayed must either be wrapped or covered. Bain-maries (or hot holding devices) are to keep hot foods above 60°C. They should not be used to reheat foods. Food must not be stacked above the level of the trays or else it will not remain sufficiently hot
- transporting food—ensure that all food that is delivered to you is done so in a vehicle that prevents contamination of the food. Food must be transported completely separate from chemicals such as detergents. Animals must not be allowed in vehicles that are used to transport food. Food, which requires refrigeration, must be transported so that food is kept below 5°C.

4.4.6.11.4 Cleaning procedures

A well-operated food preparation area demands effective, frequent and regular cleaning to remove food residues and dirt. These may contain food poisoning and spoilage organisms, attract birds, rodents and insects, and act as a source of food contamination. Effective cleaning and sanitising will minimise the risk of food contamination and food poisoning.

Cleaning procedures at temporary food stalls

The following needs to be taken into account:

If a sink connected to a water supply is not available near the stall, temporary facilities will need to be provided. Utensil washing facilities must be made available, including sealed container or drum with clean water; water-heating device such as an urn, so that hot water is available; bucket to collect dirty water; detergent; and disposable paper towels. Utensils should be washed as soon as possible in clean, soapy water and rinsed in clean water. All waste water must be disposed to the sewer, not storm-water. At the end of the day, all utensils and equipment should be thoroughly cleaned and sanitised (as described above) prior to storage.

4.4.6.11.5 Setting up permanent and temporary food premises

The following needs to be taken into account:

- permanent food premises—it is important that buildings such as the canteen, that are to be used to prepare food, are registered with the municipal council and built and designed so that the food can be prepared safely and efficiently. Contact your local council environmental health officer for details on building requirements for permanent food-handling premises and facilities

- temporary food premises—any temporary food premises (such as food stalls for a fete, barbecues, sausage sizzles etc) need to be constructed so that they can prevent the contamination of food, particularly by dust, insects and customers. All benches and tables need to have surfaces that are smooth and able to be cleaned. Hand washing and utensil washing facilities need to be provided. If they are not located in close proximity to the stall, the following temporary facilities need to be provided. Ensure that there is adequate refrigeration available. An adequate rubbish receptacle must be provided for storage of refuse. Contact the local council environmental health officer to discuss any additional requirements such as completion of an application for stalls held off campus.

Information on food safety topics can be accessed at:

<http://www.foodstandards.gov.au/newsroom/factsheets/foodsafetyfactsheets/foodpremisesandequip71.cfm>

or contact your local environmental health officer.

4.4.6.12 Mobile telephones

Research is currently being undertaken concerning the level of electromagnetic fields to which the brain is being exposed when using mobile telephones. Electromagnetic fields are invisible lines of force that surround all electrical devices and wiring. Evidence that exposure to electromagnetic fields from the antennas of mobile telephones may increase the risk of leukaemia, brain cancer and loss of memory is inconclusive. Further studies are needed to draw a more complete picture of possible health risks.

Nevertheless, it has been established that mobile telephones can have an effect on people using hearing aids, people who have cochlear implants and those with cardiac pacemakers.

Any person with a cardiac pacemaker should consult their doctor about the possibility of interference from external electromagnetic fields. When an incoming call is received, the mobile telephone switches automatically to an activated mode. It is in this mode that digital mobile telephones may interfere with pacemaker signals. As a precaution such persons should not carry the mobile telephone in the breast pocket of their shirt or jacket.

Further information is available on the Human Resources website at:

<http://www.eduweb.vic.gov.au/hrweb/ohs/accp/hazsubs.htm>

4.4.7 Safety outside school grounds

4.4.7.1 Bicycle riding

4.4.7.1.1 Helmets

The law requires that all cyclists must wear an approved bicycle helmet. Approved helmets have the Australian Standards Mark TM (AS/NZS 2063) and will be marked as suitable for cycling.

4.4.7.1.2 Cycling as a means of travel

Travel to and from school

The responsibility for children riding bicycles to and from school lies with the parents/carers. Road safety authorities recommend that before the age of nine or ten years children should not ride a bicycle in traffic without adult supervision. Depending on their cycling skills and experience, some children over this age may still require supervision.

Children under the age of twelve may ride on footpaths as may a supervising adult. They are required to give way to pedestrians and to wheel their bicycles over pedestrian and children's crossings. Children aged twelve years or older are required by law to ride on the road.

Schools may wish to consider providing secure storage for bicycles and helmets. Bicycle theft is a major problem in some areas, and in these areas school councils are encouraged to provide a roofed and locked bicycle enclosure within the sight of staff. Rails provided within the enclosure will enable bicycles and helmets to be individually secured.

Travel to and from venues

The decision to allow students to ride bicycles to and from venues during school hours is a matter for determination by the principal. In each instance, the principal should take into account such factors as the student's age, cycling experience, ability to perceive hazards, the traffic conditions, and the distances involved. Where cycling or cycle touring is to occur as an adventure activity, school council approval is needed (see 4.4.2.2 and 4.4.3).

4.4.7.1.3 Bicycle and foot races on public thoroughfares

Principals, sports organisers and physical education teachers should note that the Road Safety (Road Rules) Regulations 1999 require that events such as cross-country runs or bicycle rides that are wholly or partly conducted on public roads, must be approved by the Chief Commissioner of Police. At least two months notice must be given and a written application is required, specifying:

- the date of the proposed event
- the approximate number of competitors
- the starting and finishing times
- the route to be followed
- traffic controls
- general conditions, including escort vehicles, parking, first aid, parking, rubbish, toilets etc.

It is suggested that prior to making the application a copy of the application to the Chief Commissioner and the event management plan should be sent to local police for their information and to the municipal council and VicRoads (if the event is to be conducted on a freeway, highway, tourist, forest or main road) for their approval. In most cases the Chief Commissioner will require evidence that these approvals have been obtained before permitting the event to proceed.

4.4.7.2 School crossings

School crossing flags must be displayed for the crossing to be legally operational.

Flags at school crossings should not be left out all day or overnight. This practice could lead some motorists to ignore these crossings when students are using them. Principals are asked to ensure that flags are removed promptly when the crossing is not being used by students.

The local municipal council is responsible for school crossings, including the setting up of the crossing, the training and employment of school crossing supervisors and the supply of flags, uniforms and equipment.

The principal has no authority to instruct students to put out or take in flags, or to act as crossing monitors. The consent of parents/guardians should be obtained before any student is used for these purposes. The principal also has no authority to instruct teachers or the staff to perform crossing duties. These duties may only be undertaken on a voluntary basis. If no students or teachers are available to put out crossing flags, the principal should notify the school council and the local municipal council.

4.4.7.3 Safety House program

The Safety House Association of Victoria Inc. has established the Safety House program, which is a voluntary community organisation that has the support of Victoria Police. The Department of Education and Early Childhood Development supports Safety House programs provided that they are established under the required guidelines but has no responsibility, at either the central or school level, for their operation.

The program is designed to provide safe places for students to go to anytime that they feel unsafe or unsure. A network of safety houses is seen to act as a deterrent to undesirable persons coming into local areas.

An educational program has been developed by the association to teach students about the Safety House program and other personal safety issues. Additional resources are also available to support teaching about the Safety House program.

Principals, school staff and school councils should not assume additional responsibilities for the safety of a student once that student has left the school after the usual dismissal times; nor should they offer or seek to do so. Nevertheless, schools are encouraged to cooperate with the Safety House Association of Victoria Inc. in facilitating the establishment of local programs and in providing information to students, their parents/guardians and the local community.

For further information on the Safety House program, contact the Safety House Association of Victoria Inc., 44 Whyte Street, Brighton 3186, telephone 9593 3788, website:

Safetyhouse@bigpond.com

4.4.7.4 Flying foxes

Flying foxes are not approved as playground equipment in schools. They may, however, be erected at school camps provided that:

- they can either be locked or have the carriage removed when not in use
- staff supervise all use of the flying fox
- all students attending the camp are carefully briefed on the use of, and the dangers associated with, the flying fox
- a safety harness is always used and;
- appropriate safety precautions are taken in the construction and maintenance of the flying fox.

Further information about conducting adventure activities safely is available in the [Safety Guidelines for Education Outdoors](#) website. Specific information about Flying foxes will also be available at this website in the Challenge rope course guidelines, but is still under development.