

Health and Safety Guidelines

for community-based waterway monitoring



Health and Safety Guidelines

for community-based waterway monitoring



action
Salinity & Water
AUSTRALIA



Queensland
Government



Health and Safety Guidelines

for community-based
waterway monitoring

January 2006



action
Salinity & Water
AUSTRALIA



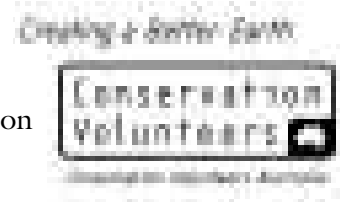
Queensland
Government

Produced by the Queensland
Department of Natural Resources and Mines



Acknowledgments

These guidelines were developed by Conservation Volunteers Australia on behalf of the Department of Natural Resources and Mines. They have been adapted from the Safety Manual for Practical Conservation Projects, 2005, published by Conservation Volunteers Australia. Permission was obtained for this purpose.



The National Action Plan for Salinity and Water Quality (NAPSWQ) is a joint Australian and Queensland Government initiative that encourages governments and regional communities to work together to address salinity and water quality issues in priority catchments throughout Queensland. This document has been produced under the NAPSWQ using Australian and Queensland Government financial support.

The Department of Natural Resources and Mines would like to acknowledge the contribution made by the project team, particularly Chris Chinn, Jaymie Rains, Garry Snowden, Kirstin Kenyon and the guidance provided through the project reference panel, specifically Ian Duncan, Deb Bass, Jon Brodie, Robert Packett, David Green, David Reid, David Hudson, Adam Richardt, Evan Kruckow, Bronwyn Masters and Andrew Grodecki.

QNRM05316

ISBN 1 921062 68 1

Copyright

© The State of Queensland, Department of Natural Resources and Mines, 2005

The Queensland Government supports and encourages the dissemination and exchange of information; however, copyright protects this document. The State of Queensland has no objection to this material being reproduced or made available online or electronically, provided it is for your personal, non-commercial use, or use within your organisation; this material remains unaltered; and the State of Queensland is recognised as the owner.

Disclaimer

In no circumstances will the Department of Natural Resources and Mines, its agents or employees be liable for any special, consequential or indirect loss or damage arising from any use of or reliance on any material appearing in this document. Users accept sole responsibility and the risk associated with any use of the material appearing in this report, irrespective of the purpose to which such use or results are applied.

While all care has been taken in the preparation of this document, the views and conclusions expressed in this document may not represent the Queensland or Australian Government views or policy. The Queensland and Australian Governments therefore accept no liability for any decisions or actions taken on the basis of this document.



Readers should be aware that some information might be superseded with further scientific studies and evolving technology and industry practices.

Release history

First released July 2005

Updates:

Date:	Page Number/s
_____	_____
_____	_____
_____	_____



Important note

This manual is presented as an advisory model for community groups to use to develop their own safety policy and procedures. It is not mandatory for groups to abide by all of these policies and procedures, although groups do have both legal and moral obligations to take reasonable steps to protect the safety of members. Once a group has adopted its own safety manual, it should form part of the internal rules governing the operation of the group.

It is recommended that this or other safety manuals be printed and stored loose-leaf (e.g. in plastic inserts in a ringbinder folder) so that updates can be added or replaced easily.

The model document has been adapted from the safety manual of Conservation Volunteers Australia, which has more complex structures and processes than needed by many smaller groups. It has been presented in this way so that groups can adapt it to their own circumstances rather than start with a very basic document which might not be adequate for more advanced groups.

The manual also outlines risk management strategies and procedures for a range of activities which, while not directly related to water quality monitoring, may be undertaken as part of a group's normal operations, for example, weed management.

The manual includes references to aspects of safety management that groups must adhere to if they are to operate within the law, including the Queensland *Workplace Health and Safety Act 1995* and associated regulations. Groups should familiarise themselves with this legislation to ensure they are meeting their obligations under state law.

The manual includes references to various permits which may be required to undertake specific activities. Groups should ensure that, where applicable, these permits are obtained.

The manual also provides details of insurance cover currently provided to groups by the Department of Natural Resources and Mines.

Contents



Important note	iv	Section 4	4:1
Section 1		Safety prompts	
Introduction	1:1	1 Vehicle travel	4:1
1.1 Background	1:1	2 Slips, trips and falls	4:2
1.2 Requirements for community-based NRM groups	1:1	3 Working in hot conditions	4:2
1.3 Components of this manual	1:2	4 Working in cold conditions	4:2
1.4 Additional considerations	1:3	5 Working in wet conditions	4:2
1.5 Presenting the manual within the group	1:4	6 Working near water	4:3
		7 Soil-borne diseases and infections	4:3
		8 Bites and stings	4:3
Section 2		9 Manual handling	4:4
Safety policy and implementation guidelines	2:1	10 Working in snake habitat	4:4
2.1 A workplace health and safety policy for use and adaptation by community groups	2:2	11 Working in crocodile habitat	4:5
2.2 General safety management	2:3	12 Accessing rugged or isolated sites	4:5
2.3 Work site safety guidelines	2:8	13 Working with chemicals	4:6
2.4 Motor vehicle and road safety	2:13	14 Surveying and data collection	4:6
2.5 First aid	2:15	15 Working near roadsides	4:6
2.6 Accident/incident reporting	2:17	16 Working from bridges	4:6
2.7 Tools and equipment	2:18	17 Working near heavy machinery	4:7
2.8 Chemicals and dangerous substances	2:19	18 Working at heights	4:7
2.9 Specific projects	2:20	19 Working with/near animals	4:8
		20 Collecting 'sharps'	4:8
Section 3		Section 5	
Workplace health and safety guidance notes	3:1	Pocket safety guide for volunteers	5:1
1 Accident/incident investigation report	3:1		
2 Risk assessment process	3:2	Section 6	
3 Insurance	3:7	Team leader project briefing guide	6:1
4 Water safety	3:8		
5 Processing workers, compensation claims	3:10	Section 7	
6 Handover to new or replacement team leader	3:11	Volunteer briefing format and safety induction	7:1
7 Preparation for remote or isolated projects	3:12		
8 Providing toilet facilities at project sites	3:13	Section 8	
9 Cyclone preparedness	3:14	Sample forms for completion	8:1
10 Bushfire preparedness	3:15	8.1 Volunteer registration form	8:2
11 Working with schools	3:16	8.2 Project risk assessment form	8:4
12 Pre-existing medical conditions	3:17	8.3 Sign on/off form	8:7
13 First aid kits	3:19	8.4 Accident/incident investigation report	8:8
14 After-hours contact responsibilities	3:19	8.5 Register of injuries	8:11
15 Pre-departure vehicle safety check	3:20	8.6 Record of paracetamol use	8:12
16 Lightning and electrical storms	3:22		



1. Introduction



1.1 Background

Many Queenslanders generously volunteer their time, knowledge and experience to assist in the improvement and monitoring of the natural environment. Participation is often through involvement in community-based organisations. The health and safety of individuals involved in these environmental programs is paramount, and there is a need for published policies, guidelines and associated material that satisfy departmental requirements and meet the needs of volunteers.

This safety manual covers all aspects of Workplace Health and Safety (WH&S) that relate specifically to the activities of volunteers involved in community-based waterway monitoring. It has been produced for the Department of Natural Resources and Mines by Conservation Volunteers Australia.

1.2 Requirements for community-based NRM groups

In Queensland, community-based natural resource management (NRM) groups are supported by the Department of Natural Resources and Mines (the department), which currently provides insurance for all registered community-based NRM groups. Each group seeking registration with the department requires a constitution that, as a minimum, clearly shows:

- the aims of the group, which should align with accepted natural resource management philosophies
- the structure of the group, which would usually be made up of a management committee, team leaders and volunteers. Depending on the size and membership of the group, some members may fill multiple roles.

Each group must maintain accurate records of decisions made to hold each activity. This requirement is important, especially if a claim is made due to an activity the group performs.

Groups must maintain accurate records of individuals participating in group activities. This is perhaps the most important administrative aspect of managing members and volunteers, yet the easiest to implement. A simple 'sign-on' form, outlining names and perhaps some contact details (e.g. address or phone number) is all that is required to fulfil this condition of insurance. This can also act as a contact list for the group's future activities.

It is essential that each group maintains the safety manual and updates it as necessary to reflect changes in group activities and specific needs. This is to ensure compliance with any insurance changes that may occur.



1.3 Components of this manual

This manual is produced in sections for ease of presenting the required information to the relevant individuals, and for easy access to recordkeeping forms. It is structured as follows.

Section 1 Introduction

Describes the context, purpose and structure of this manual, as well as other supporting information.

Section 2 Safety policy and implementation guidelines

For use by community-based waterway monitoring group *management committees* to aid safe practices in the workplace. The guidelines give basic information on a range of safety topics. The information is expanded in the guidance notes in section 3.

Section 3 Workplace health and safety guidance notes

To help group *management committees* and *team leaders* implement their safety policy correctly. The guidance notes give expanded directions on safety topics, including accident reporting and risk assessment.

Section 4 Safety prompts

The safety prompts given here are designed primarily to assist *team leaders* with two critical safety management roles. Firstly, they form a basis for developing risk control strategies as part of the standard risk assessment process. Secondly, they should form the basis of safety talks, although team leaders will, almost certainly, need to add to these prompts to take account of specific task, personnel or environmental factors.

Section 5 Pocket safety guide for volunteers

A guide for group *volunteers* outlining their responsibilities.

Section 6 Team leader project briefing guide

A guide for *team leaders* outlining safety procedures for each project undertaken.

Section 7 Volunteer briefing format and safety induction

The format is used by *team leaders* to induct new volunteers and instruct them in their safety responsibilities.

Section 8 Sample forms for completion

Each form serves as a valuable record for the group and should be completed correctly to ensure accuracy and accountability.

No task is so important that safety can be compromised



1.4 Additional considerations

1.4.1 Insurance

Community-based waterway monitoring groups are required to comply with the provisions of insurance cover provided by the department, and should be aware that extra insurance may be required in some circumstances to cover additional activities or equipment. Each group should check with the insurer regarding the presence of children or other visitors on monitoring trips.

Some activities will also require additional safety measures.

If in doubt, management committees should seek guidance about insurance issues from the Department of Natural Resources and Mines. See WH&S guidance note 3 of this manual for more information.

1.4.2 Training

This manual covers many activities where it is recommended that volunteers or team leaders undertake further training. This training may include defensive driving, first aid and workplace health and safety training. These courses can be expensive, and groups may wish to consider subsidising these costs.

1.4.3 Forms

This manual includes a number of blank forms that can be used as a basis for group 'housekeeping'. These forms should be kept strictly confidential to ensure the privacy of each volunteer. Groups may wish to design other forms to suit their activities. These forms are legitimate records of group activities and should be stored carefully, as in extreme circumstances they may be used as evidence in a court of law.

The management committee should ensure that team leaders have sufficient time and assistance to complete the relevant forms as necessary.

1.4.4 Special permits

Some group activities may require a permit from the relevant management authority, including:

- sampling from road bridges (Department of Main Roads)
- visiting a controlled water body, such as a dam or weir (water boards or local councils)
- sampling from piers, jetties or pontoons (Queensland Transport, local port authority)
- access to private property.

In each case, the group's management committee should contact the authority or landholder for advice on how to proceed.

1.4.5 Other associated activities

In addition to the well-established activities that make up waterway monitoring, groups may undertake supplementary on-ground activities. These operations are not central to waterway monitoring, but many involved in community-based activities will see them as a vital part of improving our environment. In all instances, those involved in these activities must adhere to the WH&S provisions that cover these types of associated activities.

The safety procedures set out in this manual are based on a group hierarchy of volunteers, led in the field by team leaders, who are guided and supervised by the group management committee. In instances where the management committee lacks the required expertise or experience to deal with a specific safety issue, advice should be sought from the group's regional or parent body, from the supporting department (e.g. Department of Natural Resources and Mines) or from the local office of the Queensland Department of Industrial Relations (Workplace Health and Safety).

Community-based water monitoring makes a significant contribution to the understanding and management of waterways. This contribution to the natural environment relies on having safe working conditions for all volunteers, and this can be achieved through adherence to the policies and guidelines set out in this safety manual.

**Personal safety
comes first**



1.5 Presenting the manual within the group

Each group should have a **management committee** that provides the administrative support for running a community-based group. The management committee therefore needs to have access to information to assist them in these tasks. The manual sections most relevant to the committee are:

- Introduction (section 1)
- Safety policy and implementation guidelines (section 2)
- Workplace health and safety guidance notes (section 3).

Team leaders are the leaders of groups of volunteers in the field. They typically have more training (formal or informal) and experience, and so have more responsibilities. The desired level of safety qualifications for a team leader is detailed in the manual. The team leaders should provide hands-on guidance to ensure the safety of their volunteers. The relevant sections for team leaders are:

- Workplace health and safety guidance notes (section 3)
- Safety prompts (section 4)
- Team leader project briefing and guide (section 6)
- Volunteer briefing format and safety induction (section 7)
- Sample forms for completion (section 8), particularly:
 - 8.1 Volunteer registration form
 - 8.2 Project risk assessment form
 - 8.4 Accident/incident investigation report
 - 8.5 Register of injuries.

Volunteers form the final level of organisation in the group. This is not to say they are the least important or have fewer responsibilities for their own safety and the safety of others. Volunteers should receive a guide to their responsibilities:

- Pocket safety guide for volunteers (section 5).

2. Safety policy and implementation guidelines



These safety policy and implementation guidelines are designed for use by community-based waterway monitoring group *management committees* to aid safe practices in the workplace. The guidelines give basic information on a range of safety topics. The information is expanded in the guidance notes in section 3.

	Page
A workplace health and safety policy for use and adaptation by community groups	2:2
Occupational health and safety policy statement	2:2
Explanatory notes	2:2
General safety management	2:3
Personnel qualifications and competence	2:3
Safety management responsibilities	2:3
Safety monitoring plan	2:4
Personal protective equipment and work systems	2:5
Risk assessment	2:5
Safety meetings	2:5
Projects requiring higher level risk management	2:6
Emergency response planning	2:6
Disclosure of pre-existing injuries or medical conditions	2:7
Work site safety guidelines	2:8
Work site safety	2:8
Water safety	2:9
Hard hats	2:9
Ross River fever and other insect-borne diseases	2:10
Bushfire safety	2:10
Handling of needles, syringes and other sharp objects	2:11
Work site hygiene	2:11
Manual handling	2:12
Extreme weather conditions	2:12
Motor vehicle and road safety	2:13
Team leader—driver responsibility	2:13
Speed limits	2:14
Vehicle accident procedures	2:14
Non-approved transportation	2:15
Use of mobile phones in vehicles	2:15
Prevention of weed spreading	2:15

First aid	2:15
First aid—general	2:15
First aid—medications	2:16
First aid—infection control	2:34
Accident/incident reporting	2:17
Group project report forms	2:17
Accident/incident reporting procedures	2:17
Tools and equipment	2:18
Safety with hand tools	2:18
Use of chainsaws	2:18
Use of power tools	2:18
LP gas cylinders and appliances	2:19
Chemicals and dangerous substances	2:19
Chemical use	2:19
Hazardous substances	2:20
Specific projects	2:20
Sampling from road bridges	2:20
Sampling from rail bridges	2:21
Sampling from dams, weirs and other controlled water bodies	2:21
Sampling from marine and estuarine structures	2:21
Burning off	2:21
Seed collection	2:21
Working at heights and use of ladders	2:22
Contact with animals	2:22



2.1 A workplace health and safety policy for use and adaptation by community groups

2.1.1 Occupational health and safety policy statement

The activities of a community-based waterway monitoring group shall be carried out in a manner which will protect the health and safety of its volunteers, employees, clients and members of the community. Health and safety is the responsibility of all personnel involved at community-based waterway monitoring group workplaces.

To facilitate the implementation of this policy, each community-based waterway monitoring group shall:

- provide and maintain healthy and safe work areas and safe equipment
- provide the information, instruction, training and supervision necessary to ensure the safety of all workers
- require all workers to adhere strictly to all safety regulations and advisory standards
- develop and maintain emergency procedures which, in the event of an accident, minimise harmful effects
- require all group personnel to report hazards, or hazardous practices, to their supervisors
- require all workers to accept that safe work practice is the responsibility of every person taking part in group activities.

2.1.2 Explanatory notes

Unless specifically stated, the safety procedure guidelines that follow apply to all community-based waterway monitoring group programs.

When a situation arises for which a group does not have specific safety policy guidelines, the management committee should refer to any partner agency safety procedures, relevant advisory standards, or seek expert advice, most likely from the nearest Workplace Health and Safety office, before determining an appropriate course of action.

The following policy and guideline statements have been developed to cover all reasonably foreseeable situations. Should a situation arise where the strict application of this policy may be detrimental to the accomplishment of a group's mission, and if the safety of program participants will not be compromised, the management committee, under expert advice, may authorise a variation to policy.

All Queensland workers are classed under the *Workplace Health and Safety Act 1995* (WH&S Act) as workers, whether paid employees or unpaid volunteers. In this document, unpaid volunteers and paid employees will both be referred to as workers or personnel.

As many groups will not have a large financial base, provision would need to be made with their regional or parent body or the partner agency for the supply of suitable safety equipment, either permanently or on loan. Arrangements should be made for this to be provided by the regional or parent body before proceeding with the activity.



2.2 General safety management

2.2.1 Personnel qualifications and competence

Advisable qualifications

Any worker with team leading or field supervision responsibilities (team leaders) should provide the management committee with evidence of having attained the following advisable qualifications:

- Senior or Workplace Level 2 First Aid Certificate or an approved* equivalent (approximately 20 hours of training)
- an approved* course in Occupational Health and Safety to at least Certificate 2 standard (approximately 20 hours of training)
- a current driver licence and good driving record. Holders of provisional or probationary licences must satisfy the management committee that they have the necessary skill and experience to safely transport groups of participants, taking into account the driving conditions likely to be experienced
- an approved* course in defensive driving techniques.

A driver licence and defensive driver training are compulsory for any personnel who regularly drive vehicles as part of their employment.

** approved by the management committee*

Technical skills and competence

The management committee must be satisfied that workers have the necessary skills and competence to complete their assigned duties safely and to a satisfactory standard. This consideration must be part of the risk assessment process that commences prior to project acceptance.

Where any doubt exists, the management committee should assess, or arrange an assessment of, the level of competence, and arrange further training or practice as necessary.

In particular, attention needs to be paid to vehicle operation (including trailer use), fencing, use of power tools or chemicals, work on or near water and work in remote locations.

2.2.2 Safety management responsibilities

Every group volunteer and employee has a responsibility for the creation and maintenance of a safe working environment.

The management committee is responsible for creating a strong safety culture through policy and systems development, safety performance analysis and compliance monitoring. It is also responsible for the planning and safe delivery of all projects in its region, including the registration and induction of volunteers (incorporating the development of personal risk management plans in relation to declared pre-existing injuries or medical conditions), and for maintaining and checking all safety-related records and documentation.

Team leaders are responsible for on-site safety management, including the training and supervision of program participants.

Program participants or volunteers must declare pre-existing injuries or medical conditions that may affect their participation, cooperate with the group in the creation and maintenance of safe work places and accommodation, and report any unsafe situation or practice to their supervisor.

All of the above volunteers and workers have responsibilities under each group's safety monitoring plan. (See also 2.2.3 'Safety monitoring plan', page 2-3).



2.2.3 Safety monitoring plan

The safety monitoring plan details the roles and responsibilities for specific tasks.

	Tasks	Volunteer program participants	Team leaders	Management committee	Management committee
1	Project reports		action	action	audit
2	Risk assessments	action	action	check	audit
3	Accident reports	action	action	check	audit
4	Injury registers	action	action	check	audit
5	Field staff qualifications			action	audit
6	Vehicle maintenance reports		action	check	audit
7	Safety meeting minutes			action	audit
8	Site safety inspection		action	audit	audit
9	Vehicle inspections		action	check	audit
10	Call project partner			action	audit
11	Staff welfare			check	audit
12	Volunteer feedback		check	action	audit
13	Volunteer registrations		check	action	audit
14	First aid kits		action	check	audit
15	Visit safety agency			action	audit

2-4

At no time should the achievement of work outcomes be allowed to compromise safety



2.2.4 Personal protective equipment and work systems

Each group has a duty of care to protect workers from workplace hazards, including harmful ultraviolet (UV) radiation, insect, spider and snakebites, chemical contamination and tool-use injuries.

Workplace health and safety legislation also requires that workers must cooperate with their employer, and must therefore be supervised to ensure compliance.

During the process of assessing project risks, the management committee and team leaders must consider some of the more insidious risks, such as exposure to disease-carrying mosquitoes and UV radiation. Australia has the highest rate of skin cancer in the world, with outdoor workers in the highest risk category.

While protective clothing is not normally provided, workers must be encouraged to wear clothing that provides equivalent levels of protection and to use SPF 30+ sunscreen and insect repellent.

Any management committee members and workers who visit project sites are expected to model compliance with the above personal protective clothing guidelines.

2.2.5 Risk assessment

Risk assessment process

A risk assessment process must be undertaken prior to work commencing on any project. Hazards must be pointed out to all team members and all risk control measures explained and documented on the project risk assessment form. A risk assessment process must be completed for every new work site or for every change in the nature of work being undertaken or proposed. Group offices and special event sites must also be recognised as work sites and subject to a risk assessment.

The management committee, through close examination of project application forms and liaison with landholders or project partners, must assist team leaders to plan risk management strategies. Such strategies should be expressed in terms of the actions that will be taken to manage the risks. Comments like 'awareness', 'be careful' and 'use common sense' do not describe adequate risk control strategies. Team leaders should frequently refer to the 'safety prompts' contained in section 4 of this manual for further assistance.

Once hazards are identified, the following risk control strategies must be considered in sequence:

- elimination of the risk
- engineering control
- procedural control
- personal protective equipment (PPE).

Consideration in regard to PPE should extend beyond the obvious boots, safety glasses and gloves, and might include gaiters in snake habitat, mosquito nets where there are high numbers of insects, or kneepads when stamping down branches or kneeling on the ground.

Unacceptable risk

Where the risk assessment leaves the team leader in any doubt that the project can proceed safely, work should be suspended on the project, or that component of the project that is the source of concern, and the management committee immediately consulted.

(Refer also to WH&S guidance note 2, 'Risk assessment process', page 3–2).

2.2.6 Safety meetings

The management committee is responsible for calling regular personnel meetings for the purpose of reviewing safety performance, disseminating safety information and addressing safety issues raised by personnel. Team leaders should also represent their volunteers.

The following standard meeting procedures should apply:

- meeting dates advised well in advance so that workers can plan to be in attendance or raise issues for inclusion on the agenda
- agenda circulated in advance of meeting
- the meeting firmly chaired so that discussions remain relevant and solution-focused
- workers unable to attend given the opportunity to participate via a telephone link or other means
- responsibility for any actions arising from safety meetings clearly identified in terms of what action will be taken, by whom and when



- minutes kept and circulated to all workers and volunteers, including regional volunteers, within a week of the meeting.

While community-based groups cannot be expected to hold monthly safety meetings, the group should consider some method of passing on necessary information to volunteers. Groups should at the least hold a safety meeting in response to any reportable safety incident.

2.2.7 Projects requiring higher level risk management

Justification for higher risk projects

Groups should only undertake projects that involve a higher than normal level of risk if there is a sound reason for doing so, and then only if the extra risk can be satisfactorily managed.

Factors that would cause a project to fall into this category include:

- remote location or travel (see also ‘Remote projects’ below)
- reasonable possibility of extreme climatic and associated conditions, e.g. cyclone, flood, extreme heat, bushfire. Extreme refers to conditions that are outside the range normally encountered
- proximity of heavy vehicles or machinery
- possibility of exposure to dangerous substances such as herbicides, lead-based paint or asbestos
- any risk that requires the use of personal protective equipment that would not normally be available on group project sites, or other specialised safety equipment, e.g. fall-arrest harnesses or scaffolding, respirators, disposable overalls.

During the planning phase for any such project, the management committee must seek expert advice from Workplace Health and Safety Queensland.

Remote projects

A project may be considered remote if the project team will, at any time, be more than one hour’s road travel from a hospital or from ambulance

assistance. Travel to and from the project site must also be considered. The project itself may not involve high-risk activities, but it must be recognised that the management of injury in a remote setting is substantially more challenging and stressful for the team leader and the injured person. Therefore it is essential that assessment and management of both low and high level risks be considered well in advance of project implementation.

An emergency response plan must also be developed and ‘tested’ against hypothetical, but reasonably foreseeable, worst case scenarios. A reliable communication strategy must be prominent in every emergency response plan.

2.2.8 Emergency response planning

Every group work site is required to have an emergency response and evacuation plan that is communicated to all people working at that site. Consideration must be given to reasonably foreseeable emergencies so that appropriate response plans are developed. The plan needs to identify strategies for both getting assistance to the team or work groups and evacuating the team or work groups to a safer location.

Project sites

So far as is practicable, every project team should have reasonable access to two forms of communication. The position where communication signal is strongest should be determined and then marked. The vehicle should be parked in a position where it is immediately available for evacuation, and should have sufficient fuel to reach the nearest hospital or point of emergency assistance. The team leader must identify a suitable emergency signal such as a whistle or vehicle horn blast. Alternative escape routes need to be identified in recognition that the preferred route might not be safe or available (e.g. because of bushfire or flood).

Concise and unambiguous directions to the site (including, where appropriate, map references or references to readily identifiable landmarks) must be recorded on the risk assessment form where they are accessible to all team members. Any team members with first aid qualifications or experience should be identified so they can assist with the treatment of injuries, or in communicating with emergency services. Confidentiality should be ensured. Team members may not wish others to know they have first aid qualifications.



Consideration must also be given to the possibility that the team leader may be incapacitated and unable to initiate or lead the emergency response.

At the first practicable opportunity, after team members have been made safe and emergency services alerted, the team leader should advise the management committee, who in turn will advise the regional or parent body.

Emergency communication protocols

Communications during an emergency are critical, and disciplined compliance with priorities is essential. Groups should follow a concentric circle model that reflects priorities as follows:

Inner circle—the site of the emergency, where communication is between the team leader and the relevant emergency services. Minimising interruptions and interference is vital. The team leader alerts the management committee at the first practicable opportunity.

Middle circle—the management committee communicates with other staff, or auxiliary support services, to arrange further assistance for the team leader and team. The management committee alerts the regional or parent body.

Outer circle—the regional or parent body will arrange further assistance to the inner and middle circles, and will possibly deal with issues like media liaison, notification of insurers, international communications and emergency staffing.

In circumstances where the life or safety of any person is at serious risk, contact the appropriate emergency service immediately. If uncertain how or if to proceed with an activity or project, do not proceed without first consulting the management committee or its nominee. The achievement of project outputs (e.g. water quality testing) should never become a higher priority than the safety of people.

A good guideline is 'do not do anything you think is unsafe, regardless of what anyone else thinks or instructs you to do'

The purpose of communications should be to arrange assistance for the team as quickly and effectively as possible, so as to minimise harmful effects to individuals and to groups. It is essential that team leaders have all necessary emergency contact details. The national '000' emergency number should be backed up with local emergency services numbers and the '112' emergency number for mobile phones. Management workers must have immediate access to the contact details necessary to allow timely and efficient contact as detailed in WH&S guidance note 14, 'After-hours contact responsibilities', page 3–19.

No member of the inner or middle circle should offer, or be drawn into, any media comment in respect of an emergency, unless specifically authorised by the regional or parent body. A polite 'no comment' is all that should be offered.

2.2.9 Disclosure of pre-existing injuries or medical conditions

Each group accepts it has a responsibility to provide a safe workplace for workers. The safety of a work site or work practice cannot be assessed without consideration of the capacity of the people involved. An activity that is safe for one person may be unsafe, even dangerous, for another person who has a pre-existing injury or medical condition. Consequently new workers must have their foreseeable tasks and work sites clearly explained to them so they are able to make a properly informed and considered decision about the disclosure of pre-existing conditions. Any personal information disclosed to a team leader must be treated in strict confidence and used only for the purpose of safely and discreetly managing the condition disclosed.

Volunteers must complete a volunteer registration form, while staff members complete the group's employee information form. If any condition is disclosed, an appropriate management plan must be developed and agreed as practicable by the worker and their manager.



Regular workers should be asked to renew their registration every twelve months, or sooner if their health or fitness status changes.

Personnel who are to conduct sampling should be physically and mentally able to carry out fieldwork. For example, if sampling personnel fall into a water body, they must be physically fit enough to get out without assistance (although personnel should never work alone in the field). Sampling personnel working near water must be able to swim. They must also be able to climb up riverbanks. In proper professional practice, risks must be reduced as much as possible and personnel must not be required to operate in conditions that are unsafe.

(See also WH&S guidance note 12, 'Pre-existing medical conditions', page 3–17).

2.3 Work site safety guidelines

2.3.1 Work site safety

For the purposes of this manual, a workplace or work site is any site a team of volunteers goes to for the purpose of water quality monitoring or other natural resource management activities.

Team composition

All group teams should consist of at least two members, including the group team leader. This is to ensure increased safety at work sites. If a team member is injured, the remaining member/s will be able to remove the injured party to safety and medical treatment, if necessary.

Smoking, illegal drugs and alcohol

Smoking, or the storage or consumption of alcohol or illegal drugs, should not be permitted within the confines of group project sites or vehicles. At outdoor project sites, smoking should only occur during designated breaks, and then only where other people will not be exposed to the risks of passive smoking. Smoking may not be permitted at all if the team leader deems the fire risk to be unacceptable.

Volunteers should adhere to a policy of 'zero blood alcohol' levels while working on group projects. While engaged in camping trips, recreational alcohol consumption should be limited.

Breaches of this policy will lead to normal disciplinary procedures for staff, while volunteers may be asked to leave the group.

Team leader responsibility

The general safety and welfare of program participants is the team leader's prime responsibility for the entire project duration. If, for any reason, the team leader must leave or divide the group, careful thought must be given to the most appropriate arrangement to ensure that supervision is maintained.

**Personal safety
comes first**



Positive work site behaviours

Notwithstanding responsibilities detailed elsewhere in this policy, it is expected that team leaders will demonstrate the following positive safety behaviours.

- On arrival, and regularly throughout the project, inspect the site for hazards.
- Ensure that a safety vehicle is on site and parked in an unobstructed exit. It is advisable that this vehicle should also have a state-compliant fire extinguisher.
- Have escape routes planned.
- Ensure that the vehicle has sufficient fuel to reach the nearest hospital or doctor.
- Provide a tool demonstration that is adequate to stress safety and efficiency. This should include emphasis on safe tool use, carrying and storage.
- Keep both the accommodation and work sites tidy.
- Use fire responsibly, especially during high fire danger periods. (See also 2.9.5, 'Burning off', page 2–21).
- Ensure that the first aid kit is accessible at all times.
- Intervene immediately if any dangerous practice is observed.
- Constantly reinforce the importance of safety and hygiene by personally modelling safe and healthy practices.
- Make a note of any accidents, incidents or recommendations that need to be brought to the attention of the management committee.
- Record any injuries sustained, and first aid treatment administered, in the register of injuries. More serious accidents must be reported on the accident/incident investigation report form.
- Team leaders should wear a high visibility vest to allow for ease of identification in the event of an emergency.
- If working near roadsides, all team members should wear a high visibility vest.

No task is so important that safety can be compromised

2.3.2 Water safety

It should be apparent that the water safety of volunteers is vital. Unless a group participant has detailed knowledge of the water body to be monitored, the site should be regarded as potentially dangerous. Care in all activities should be taken and risks managed appropriately.

The risks arising from interaction with swiftly moving, deep or very cold water present a major safety management challenge to waterway monitoring personnel. Even relatively shallow streams are potentially hazardous in the event of a victim being unable to reach safety due to incapacity or injury.

Swimming competence should be a prerequisite for personnel involved in projects where entry to the water is required. Team leaders should ensure team members can swim competently enough to be safe in the water environment in which they may foreseeably find themselves.

Each monitoring site will have its own range of hazards to be aware of. These might include the presence of broken glass on the stream floor, stonefish or bullrouts, or pollutants. Marine and estuarine sites pose extra safety hazards for monitoring groups, including tidal heights, rocky shores, marine stingers, sharks, crocodiles and mangroves. Each group should investigate the site before monitoring activities take place, and adequate risk management procedures should be followed.

2.3.3 Hard hats

Where the project risk assessment indicates the potential for head injury to be sustained, hard hats must be worn. Typical circumstances where the use of hard hats would be indicated include work situations where:

- tree limbs or any other objects may fall
- rocks may dislodge from steep track sections or embankments
- tools or timber may be carried, swung or lifted at, or above, head height
- one worker is working above another.



If a potential for head injury is recognised, efforts must be made to eliminate or reduce the risk, before workers with hard hats are permitted to work on site.

Because chemicals found in some felt pens and adhesives may affect the performance of hard hats, no unauthorised stickers or writing (e.g. names or slogans) are to appear on group hard hats.

The management committee shall ensure each volunteer is responsible for the cleanliness, hygiene and maintenance of their issued hard hats.

In order to facilitate monitoring the age of hard hats, it is essential that the replacement date be entered inside each hat before it is issued for the first time.

2-10

2.3.4 Ross River fever and other insect-borne diseases

Ensure that all workers and program participants are frequently reminded of the need to take precautions to minimise the chance of infection.

Among the steps to be taken are:

- making people aware of the risk, particularly in relation to mosquito, leech and tick bites
- monitoring compliance with the group's protective clothing policy (e.g. long trousers, long sleeves)
- ensuring that insect repellent is available. Workers should be encouraged to carry their own
- encouraging the use of mosquito nets
- modifying work practices to avoid locations or times of day when insects are more prevalent or active.

There is no need to cause alarm, but it is prudent to raise awareness of the risk and remind all personnel of the easy precautions to be taken.

2.3.5 Bushfire safety

It is essential that the possibility of bushfire is a prominent aspect of all group risk assessments.

In particular, the following questions need to be considered:

- How great is the threat of fire? *Consider the project area, the weather forecast etc.*
- Are there escape routes? Is the team leader clear on these? *Fires are unpredictable and often change direction.*
- Are emergency communications available? *This is absolutely essential in high-risk areas.*
- Does the team leader regularly monitor radio news reports?
- Have the issues of bushfire threat and emergency evacuation been discussed with the partner agency?
- Are group team leaders and project participants acting responsibly regarding the use of fire while at project sites or accommodation? *While being mindful of the threat of fires caused by external forces, the group must ensure that all group personnel model the highest standards of fire safety, including safe extinguishing of cigarette butts.*
- Are the above issues highlighted in safety talks to project participants? *Everyone must know what to do in the event of an emergency evacuation.*
- Do vehicles have sufficient fuel to enable them to evacuate an area safely?

During high fire danger periods, the advice of the local Rural Fire Brigade senior officer should be sought before a team travels into a fire risk area. The fire service may be aware of proposed controlled burns or risks. The Rural Fire Brigade senior officer should be advised of the location of any group. Team leaders are to be aware that finishing the project is NEVER a higher priority than the safety of the team. The management committee and team leaders must be prepared to withdraw teams, or not send them, when the fire risk is unacceptably high.

(See also WH&S guidance note 10, 'Bushfire preparedness', page 3-15).



2.3.6 Handling of needles, syringes and other sharp objects

Whenever teams are to be involved in projects involving litter collection, clean-ups or hand weeding, the risk assessment must take account of the potential presence of needles, syringes and other sharp objects.

Methods must be devised to reduce the risk of puncture, laceration or infection occurring as a result of handling sharp objects.

Needles and syringes found in the course of duties should be picked up using implements such as shovels, spades or tongs, and then placed in an impervious container. Gloves resistant to needle-stick should be worn.

If needle caps are present, no attempt should be made to re-cap the needles, as this action has significant risk of needle-stick injury.

The 'sharps' container should be crush-resistant and able to be sealed effectively and transported in a safe and secure manner. The local health authority should be contacted for advice regarding the proper disposal of needles and syringes.

Where a high incidence of needles or syringes is evident at the project site, it may be deemed necessary to have the site assessed by the local health authority, which may have to clear the needles from the site before the project proceeds.

2.3.7 Work site hygiene

The provision of ready and sensitive access to adequate work site hygiene facilities is critical in preserving the health and dignity of all team members. Such provision must also account for environmental impact issues.

It is the responsibility of the management committee, when negotiating projects with partner agencies and landholders, to determine the strategies to be used in ensuring that the rights of team members in this regard are protected.

Disease control

Conditions such as influenza, meningococcal disease and severe acute respiratory syndrome may be transmitted through saliva or airborne particles resulting from coughing or sneezing. The sharing of drink bottles or cups must be avoided unless they have been properly washed between users, and all workers should have ready access to soap and water for frequent hand-washing. Workers

suffering from colds or flu should be discouraged from travelling in team vehicles where there is an increased risk of spreading bacteria.

Access to toilets

All work sites must have access to toilet facilities that allow for the privacy and hygiene of team members. This access can be provided, in priority order, by:

- fixed or portable toilets on site
- the construction of pit toilets in keeping with personal and environmental requirements in situations where this is the only practicable solution available
- the provision of a morning, lunchtime and afternoon trip for the whole team to toilet facilities, in situations where a team is operating for short times, and where neither of the above is practicable.

All toilet facilities must have the accompanying requirements necessary for team members to adhere to hygienic toilet use practices in relation to washing and the appropriate disposal of waste products.

Team leaders have the responsibility to ensure that these provisions are managed in a sensitive manner that will not cause embarrassment to team members. In particular, the need to account for the dignity and rights of female team members during menstruation is critical.

The provision of personal hygiene items is the responsibility of the individual. However the group must always provide access to soap and water. It is also advisable for supervisors to have a supply of sanitary pads available.

(See also WH&S guidance note 8, 'Providing toilet facilities at project sites,' page 3–13).



2.3.8 Manual handling

Manual handling refers to a wide range of activities including lifting, pushing, pulling, lowering, holding, carrying or restraining any object, animal or person. These activities commonly give rise to such injuries and conditions as muscle strains and sprains, tendon and ligament injuries to wrists, arms, shoulders, neck or legs, injuries to intervertebral discs and other structures of the back, abdominal hernias and chronic pain.

Pre-project planning and preparation

As far as possible, prior to project commencement, the management committee should plan and negotiate the control of manual handling risks by arranging the strategic pick-up or delivery of project materials and tools so as to minimise the amount of lifting and carrying required.

On-site risk assessment

At the project site risk assessment stage, deliberate strategies should be developed to eliminate or minimise:

- the lifting and lowering forces (loads)
- the need for bending, twisting and reaching movements
- pushing, pulling, carrying and holding.

Tasks requiring people to lift, lower, carry, hold, pull or push while bending, twisting or reaching should be avoided. Consideration must also be given to the duration of the activities and the physical capacity (including pre-existing conditions) of those proposed to undertake them.

Only after the tasks have been modified to minimise the above risks should consideration be given to task rotation and the demonstration of individual or team lifting techniques. Loads (weights) should be ‘tested’ before any lifting is attempted. Smart solutions (‘brain power’ instead of ‘brawn power’) should always be sought in the first instance.

The potential for finger or foot crush injuries must also be considered if heavy lifting is to be undertaken.

Repetitive actions

Repetitive actions, even when the load is minimal (e.g. raking mulch), present manual handling risks, especially for those who are not conditioned to the activity. These activities require careful and deliberate risk management.

2.3.9 Extreme weather conditions

For group purposes, ‘extreme weather conditions’ refer to situations where conditions have the reasonable potential to cause stress or extreme discomfort to workers. It is reasonable to assume that group workers will expect to experience some measure of discomfort attributable to climatic conditions, but the standard risk assessment process must be enacted in order to ensure that risks are kept within the range of acceptability. The risk assessment process must take into account considerations such as the expected duration of the extreme conditions, the quality of shelter and protective clothing available, the proximity of accommodation relief, the degree to which workers are acclimatised to the conditions and the physical demands of the tasks being undertaken. Pre-existing injuries or medical conditions must also be taken into account. Because there are so many variables, groups should not set arbitrary temperatures as a determinant of when work should cease.

Both extreme heat and extreme cold can progressively affect outdoor workers, and create risks related to changes in core body temperature and impaired coordination and judgment. It must be recognised that individuals may react very differently to extreme conditions, so team leaders must be mindful of the need to monitor and manage individual workers in these circumstances.

Consideration must also be given to associated risks such as bushfire, sunburn, flooding, high wind, heavy rain and more hazardous road conditions.

Lightning and electrical storms

Lightning strikes may actually cause more fatalities in Australia than snakebite. Consequently, associated risks must be taken seriously and

managed in accordance with the '30-30 rule'—when the sound of thunder follows less than 30 seconds after a visible lightning flash, outdoor workers should seek immediate shelter inside a building or vehicle and remain there for at least 30 minutes after the last lightning flash is seen, or call the activity off altogether. Research indicates that more than half of all lightning deaths occur after the thunderstorm has passed.

Remember DO NOT take cover under trees during an electrical storm, due to both the possibility of falling branches and the increased risk of lightning strikes.

Do not use landline telephones during electrical storms, as the risk of lightning strike is high.

Pre-planning

During the project planning and development phase, the management committee must consider the likelihood of extreme conditions, and ensure that so far as practicable, alternative activities are negotiated, the team leader is adequately briefed, pre-existing medical conditions of volunteers are considered and the team is appropriately resourced.

(See also WH&S guidance notes 9, 'Cyclone preparedness', page 3–14; 10 'Bushfire preparedness', page 3–15; and 16 'Lightning and electrical storms', page 3–22).



2.4 Motor vehicle and road safety

2.4.1 Team leader—driver responsibility

Road safety

Statistics show that transporting teams to and from project sites is the highest risk activity normally undertaken by groups. The highest standards of safety and responsibility are expected of team leaders when driving team vehicles.

- All drivers of group team vehicles must hold a current driver licence, and have undertaken approved defensive driver training. (See also 2.2.1, 'Personnel qualifications and competence', page 2–3 and 'Emergency circumstances' below).
- Only experienced four-wheel drive operators should drive off-road or in rough conditions.
- Drivers must comply with Queensland road laws, except where more stringent standards are imposed by a group.
- Vehicles must be driven in a manner that ensures all occupants are safe and feel safe.
- Seatbelts, where fitted, must be worn by all occupants whenever a vehicle is in motion.
- It is advisable that when driving on highways or in remote areas the vehicle headlights should be on to increase visibility. Remember to switch them off when the vehicle is not in operation!
- Chemicals or unsecured tools and equipment must not be carried in team vehicles. Vehicle occupants should limit 'in-vehicle' luggage to a small day-pack. Larger, heavier luggage should not be carried unsecured inside the vehicle.
- Program participants are not authorised to drive team vehicles other than in emergency circumstances. (See also 'Emergency circumstances' below).
- Extreme care should be taken when travelling on roads that have recently been subjected to flood waters. Road washouts can occur and be hidden by seemingly 'shallow' muddy puddles.



The driver should assign a team member to manually test the depth of washouts (i.e. use a stick or carefully wade). These washouts are often found on the approaches to culverts and bridges.

- Team leaders must undertake a pre-departure vehicle check prior to departing to, and returning from, each project.
- A ‘zero blood alcohol’ requirement applies to the drivers of all team vehicles.
- Drivers must maintain sufficient fuel to reach the nearest hospital or medical centre.
- Drivers are not permitted to drive more than 600 km per day without specific authorisation by the management committee.
- Team leaders should not, without authorisation from the management committee, take home group vehicles if the distance between the team leader’s home and the team pick-up point exceeds 30 km.
- Because of the risks associated with the transportation of teams, the management committee must not approve or undertake projects that involve unnecessary travel.
- Whenever a vehicle with a trailer attached is being reversed, at least one team member must be delegated to stand in a safe place outside the vehicle, and provide direction to the driver.
- Team leaders must not drive vehicles they know to be unsafe.

Vehicle maintenance

The following standards are required to maintain vehicles to the highest standards:

- Vehicles and trailers must be maintained in a safe and roadworthy condition. Responsibility for vehicle and trailer maintenance and servicing rests with the team leader in consultation with the management committee.
- Vehicle maintenance reports must be completed and lodged as requested by the management committee.
- Trailers must only be used in accordance with vehicle manufacturers’ recommendations—refer to the vehicle owner’s manual.
- Trailers should be serviced at least annually, or more frequently if subjected to heavy usage.

(See also WH&S guidance note 15, ‘Pre-departure vehicle safety check’, page 3–20)

Emergency circumstances

Team leaders are advised to identify an appropriately licensed team member who can drive the vehicle in an emergency that renders the team leader incapable of driving safely. In this circumstance, the designated emergency driver should be instructed to transport the team to the nearest safe point of communication and contact the management committee for further advice. In some circumstances, it may be preferable that the emergency driver transports the team leader to medical aid without exposing the rest of the team to the danger of travelling with a driver who is not accustomed to the vehicle being driven.

2.4.2 Speed limits

All groups should consider limiting vehicles to a speed that is 5 km/hour below the speed limit, with a maximum of 75 km/hour on unsealed roads. Lower speeds will apply as required by adverse driving conditions or when towing trailers.

2.4.3 Vehicle accident procedures

General procedure

If a group vehicle is involved in a motor vehicle accident, the law requires the driver to take the following action:

- Stop immediately.
- Remember to check for personal danger before rushing in to an accident scene (e.g. presence of electrical wires, spilt fuel).
- Give assistance to any injured person.
- Send for police and ambulance if anyone is injured.
- Give the driver’s name and address, registration number, and vehicle owner’s name and address to the other parties.
- Unless there is a serious injury or fatality that may require investigation by police, remove all debris from the road.
- Report the accident to the nearest police station if there is only property damage, and the owner (or a representative of the owner) is not present.
- Report the accident to the nearest police station if anyone is injured.

Do not admit liability, as this may jeopardise the insurance cover. Report the accident immediately to the group’s regional manager, who will determine what further action is necessary. If the management committee is not contactable, and any occupant of the group vehicle has been injured, the team leader must ring the regional or parent body who will advise other people as necessary.



2.4.4 Non-approved transportation

Open vehicles

No person should be transported on the back of open vehicles such as trailers, utilities and tray trucks, including program participants, volunteers and workers.

2.4.5 Use of mobile phones in vehicles

There is evidence that even ‘hands-free’ talking on the phone while driving can significantly increase the risk of accident. All volunteers and workers who drive vehicles with hands-free phone kits must adopt a sound risk assessment approach to using the phone while driving. This applies to both making and receiving calls. Phones should be turned off or not answered when traffic or road conditions demand the driver’s total concentration.

Hand-held mobile phones (i.e. phones without a hands-free kit or cradle) **MUST NOT** be used by any group volunteers and workers while driving.

2.4.6 Prevention of weed spreading

Drivers need to be aware of legislative requirements for preventing weed spread. When a vehicle or machine is driven through a weed-infested area, seeds become lodged in cracks and crevices including tyre treads, radiators, licence plates and the underside. The seeds may then be carried hundreds of kilometres before dislodging in new areas.

It is now an offence under the *Land Protection (Pest and Stock Route Management) Act 2002* to move or transport a vehicle on a road, if it or its load is contaminated with a declared plant, unless the load is contained.

Before entering a property, you should ensure your vehicle is free of weed seeds. Contact landowners before entering their properties and check what their requirements are for preventing the spread of weeds.

Numerous washdown (cleardown) facilities have been built in Queensland to help people remove weed seeds, soil and other foreign matter from their vehicles and machines. A comprehensive list of individual facilities and procedures is available from the Department of Natural Resources and Mines website at www.nrm.qld.gov.au/pests.

Health and safety needs must be taken into consideration when removing soil and other material from vehicles upon leaving the site and when handling contaminated material, as many weeds have allergenic properties.

2.5 First Aid

2.5.1 First aid—general provisions

Content of first aid kits

An ‘outdoor’ kit or equivalent is the standard for regular project teams numbering four to ten. An ‘accident action pack’ or equivalent should be adequate for smaller teams (e.g. travelling management staff). These kits should be supplemented by the addition of an approved resuscitation mask and any additional items deemed necessary after consideration of risks associated with the tasks to be undertaken.

(See WH&S guidance note 13, ‘First aid kits’, page 3–19, and 3–20, ‘Medications’, page 2–16).

Management of first aid kits

Team leaders are responsible for managing their first aid kits, including:

- checking contents of first aid kits before departure
- ensuring that kits are loaded and accessible
- checking emergency contact numbers are included
- checking hospital and phone locations are known
- identifying any volunteers with first aid qualifications
- ensuring that team members know the whereabouts of first aid kits
- ensuring the adequacy of first aid kits in relation to any known pre-existing medical conditions or injuries (notwithstanding the personal responsibility of participants to provide their own medications in accordance with their personal risk management plan)
- maintaining the register of injuries and record of paracetamol use forms
- restocking the kits after returning from projects.



First aid provision at group offices

The management committee must ensure that the group office has an appropriate first aid kit and a first aid-qualified volunteer or worker designated to take responsibility for the maintenance of the kit.

First aid kits in management vehicles

A group vehicle is a work site for management staff, and must therefore carry a first aid kit.

2.5.2 First aid—medications

Under normal circumstances, groups do not supply medication. Volunteers must be made aware of this and asked to supply and administer their own medication. Groups do however recognise that occasions may arise where volunteers unexpectedly require pain relief medication. In these circumstances, paracetamol tablets may be issued in a controlled manner in accordance with dosage directions on the packet. Team leaders must record details of medication used, on a 'Record of paracetamol use' form that must be countersigned by the person using the tablets. Controlled issue means that the team leader will only make available the number of tablets allowed by the dosage directions. Volunteers must not be given free access to packets of paracetamol tablets.

Background

Workplace Level 2 or senior qualified first aiders are not authorised to administer or supply scheduled medications, and may be breaking the law if they do so. Many scheduled medications can cause harm if misused. First aid courses at this level do not give training in the use of medications. First aiders cannot reasonably be expected to have knowledge of the medications they may encounter, such as correct dosage, indications for use, precautions associated with use, drug interactions and contraindications. First aiders are not qualified in diagnosis. First aid training is basically directed towards maintenance of the airway and circulation, control of bleeding and management of fractures and burns. The contents of the first aid kit should reflect these priorities.

It is preferable to actively manage the cause of headaches (e.g. excessive noise, dehydration), rather than being reactive by providing pain relief tablets.

2.5.3 First aid—infection control

Universal precautions

Strict adherence to universal hygiene precautions is the most effective way of managing potential workplace infectious diseases that may range from measles and common cold to hepatitis and HIV. All first aiders must treat the blood or bodily fluids of all people as potential sources of infection, independent of diagnosis or perceived risk. This is essential for the protection of the first aider and any other workers with whom they have contact.

Infection control strategies

The following strategies should be followed to assist with infection control:

- Create a barrier between the first aider and any blood or bodily fluids by using disposable non-latex gloves (e.g. Ansell Dermaprene, Baxter Duraprene and J&J Allergard). Goggles and other protective clothing may have to be considered in some circumstances.
- Immediately and thoroughly wash, with soap and water, any part of the body that comes into contact with blood or bodily fluids. Flush eyes and mouth with clean water.
- Carefully clean up blood spills and clean surfaces with disinfectant.
- Appropriately launder or dispose of any items that have been soiled with blood or bodily fluids.

Confidentiality

Program participants or group volunteers and workers are under no obligation to disclose their disease status. Should any volunteer or employee choose to disclose their disease status, this information must be treated in strict confidence. It is against the law, and contrary to group policy, to discriminate against anyone on the basis of their disease status.



2.6 Accident/incident reporting

2.6.1 Group project report forms

The community-based waterway monitoring groups' project report forms are the official records of group projects. As such, each form is a legal document that could be presented in court in the event of legal action that follows a project-related accident.

Team leader responsibility

Team leaders must complete these reports with care, and in a manner which reflects the professionalism of the team leader and the group as a whole.

There is a need to ensure consistency throughout the report in the documentation of hazards identified and risk management strategies formulated, inclusive of hazards noted on the project proposal. The risk assessment section should draw together all safety management considerations, and focus on appropriate risk control. The team leader will introduce additional safety talks as the need arises, and note these on the report.

Where a work injury or illness requires professional medical attention, renders an employee or volunteer incapable of working on the next work day after the injury, causes property loss or damage, or where a near miss causes any of the above, an accident/incident investigation report must be completed. See definitions of 'medical treatment case' and 'lost time injury' which follow.

All injuries should be recorded in the register of injuries, even those that appear minor. This information is important to the process of reviewing and improving safety performance. The team leader is required to ensure all participants have access to the register and understand its purpose.

Flippant or sarcastic comments must not be recorded on project report forms.

A medical treatment case (MTC) arises when the team leader determines that an injury or illness requires assessment or treatment by a qualified doctor, nurse or paramedic. On-site first aid does not constitute an MTC.

A lost time injury (LTI) arises when a person injured while at work or under group care is unable to report for duty, including light or modified duty, on the next work day after the injury occurred.

Management committee responsibility

The management committee must review all group project reports to ensure their accuracy and completeness, and note any issues that require follow-up. Any action taken by the management committee in relation to issues arising from a report should be noted in the appropriate sections of the group newsletter or notification system.

2.6.2 Accident/incident reporting procedures

Register of injuries

Every group's workplace **must** have a register of injuries to which volunteers and workers and program participants have ready access. Details of injuries, including those that appear minor, should be recorded in the register.

Accident/incident investigation report

Where a work injury or illness requires professional medical attention, renders an employee or volunteer incapable of working on the next work day after the injury, causes property loss or damage, or where a near miss occurs which causes any of the above, an accident/incident investigation report must be completed.

The process of lodging accident/incident investigation reports is as follows:

- Injury or accident occurs and appropriate treatment is rendered or arranged.
- Team leader carefully and accurately completes report, has it signed by injured or affected person, then forwards the report to management committee. It is important that the root cause of the incident is identified, and the report lodged within 48 hours.
- If the injured person is a paid staff member, management committee forwards workers' compensation form. (See also WH&S guidance note 5, 'Processing workers' compensation claims', page 3–10).
- The management committee takes whatever additional follow-up action is deemed necessary to prevent a recurrence of the accident, and notes this on the report.



- The management committee signs accident/incident investigation report, summarises any additional action taken, then sends the report to the regional or parent body.

Regional offices must ensure that team leaders have a supply of blank accident/incident investigation report forms with them at all times.

When deemed necessary by the management committee, a serious incident investigation report must also be completed.

Ambulance evacuation or hospitalisation

In the event that an injured or ill person requires ambulance or similar emergency evacuation or admission to hospital, the regional or parent body must be advised immediately, via the management committee.

2-18

2.7 Tools and equipment

2.7.1 Safety with hand tools

Tool talks

While working on a project, team leaders must provide daily tool demonstrations that are adequate to stress safe and efficient use. In general terms, tool talks should include the name of the tool, what it will be used for, how to check that it is safe to use, how to use it safely, how to carry it and how to leave the tool when it is not in use.

General tool safety

The following tool safety guidelines should be observed:

- It must not be assumed that a single demonstration is adequate. Frequent revision is required and diligent monitoring is essential.
- Team leaders must intervene immediately any unsafe or inappropriate work practice is observed.

- Where 'swinging' tools (e.g. pick, mattock, axe) are being used, a safe working distance of 3 m should be maintained.
- Program participants who are of slight build may be at greater risk of injury while using some tools. Task allocation and duration must be monitored closely to safeguard against overuse or repetitive strain injuries.
- Team leaders should be alert for signs of fatigue, as participants who are unfamiliar with using certain tools may tire quickly and become more at risk of accidental injury, not only to themselves, but to other participants.
- Additional care must be taken when using or carrying tools when the ground underfoot is slippery or uneven.
- Team leaders must ensure that tools are properly maintained. Blunt or broken tools may increase risks associated with their use.

2.7.2 Use of chainsaws

Personnel are not permitted to operate chainsaws, or undertake chainsaw training, without authorisation from the management committee.

If authorisation is obtained, provision must be made for the proper supervision of other program participants to ensure their safety during the chainsaw activity.

Any person given permission to operate a chainsaw must be appropriately accredited, through a registered training organisation, for the task being undertaken.

2.7.3 Use of power tools

The term 'power tools' refers to motorised equipment such as mowers, brush cutters and augers, and electric powered tools such as drills, grinders, and sanders. (The tools mentioned here are indicative and not a complete list.)

The management committee may approve the use of these items subject to the following conditions:

- The team leader must be appropriately qualified and experienced in the safe use of the equipment.
- The team leader will maintain direct supervision at all times.
- The team leader will ensure that the operator is of sufficient strength and stature to control the equipment safely, and that the operator has been adequately trained in power tool use and associated hazard identification and control.
- The team leader must be able to determine whether the equipment is in safe operating order.



- The team leader must ensure that equipment is not operated in close proximity to other people.
- All necessary personal protective equipment must be worn.

2.7.4 LP gas cylinders and appliances

LP gas cylinders

- Because LP gas is stored under pressure, cylinders must be tested every 10 years. The management committee must ensure that a system is in place to have the currency of cylinders maintained.
- LP gas cylinders are fitted with safety valves to relieve excess pressure in the case of extreme heat. Cylinders should always be stored upright to allow this valve to operate correctly.
- After use, the cylinder valve should be turned off while the appliance is still operating. Then the appliance valve should be turned off. This allows the hose to empty.
- A regulator should be used with low-pressure appliances. If in doubt, seek advice from a registered dealer.
- Cylinders and appliances may only be repaired by qualified dealers.
- Damaged or corroded cylinders must never be used.
- Cylinders must never be exposed to extreme heat or kept in a car boot for long periods.
- Cylinders may only be refilled by properly registered refillers. Group volunteers and workers must never attempt to refill cylinders.
- 'Empty' LP gas cylinders must never be incinerated.

LP gas appliances

- Look for Australian Gas Industry approval notice when purchasing an appliance.
- Keep appliances in good condition. Corrosion or leaks should be repaired promptly.
- Gas appliances should always be well ventilated. Never use a portable or unflued gas appliance in a closed tent or van. Build-up of unventilated flue gases can cause death.
- Inspect and replace worn flexible hoses.
- Appliances and cylinders should be placed where they cannot be knocked over or tampered with.
- Plastic or other tubing must never be used as a gas hose.

Training of workers

The management committee must be satisfied that volunteers and workers who will be handling and using LP gas cylinders and appliances are competent to do so.

2.8 Chemicals and dangerous substances

Groups should not carry chemicals or dangerous substances inside vehicles. They should be transported in the tray section of utilities or in a trailer to avoid injury due to spillage or escaping fumes.

2.8.1 Chemical use

Low-risk chemicals and application methods

The management committee may approve chemical-use projects, provided that:

- the chemical to be used does not have a 'Dangerous Goods' classification (DG Class) and is rated no higher than S5 on the Poisons Schedule. For example, products such as Roundup or Glyphosate (S5 with no DG Class) may be approved by the management committee, while the use of Fusilade (S6, DG Class 9) requires authorisation by the management committee
- all precautions and safe handling instructions described in the material safety data sheet (MSDS) and on the product label are complied with, and all team members have access to the MSDS. This includes the provision of at least 40 litres of clean water to allow first aid to be administered in the event of a splash to the eye
- all necessary personal protective equipment is provided and worn
- project participants are given adequate instruction concerning safe chemical use, associated health hazards and emergency treatment, and the reasons for use
- the team leader has qualifications and



experience suitable for the task to be undertaken and in compliance with state requirements.

Higher toxicity chemicals

The use of classified Dangerous Goods, or chemicals with a Poisons Schedule rating above S5, must be approved by the management committee. Requests must be submitted a clear seven days before approval is required.

Chemical spraying

Chemical spraying, irrespective of the chemical to be used, may only be undertaken with the authorisation of the management committee.

2.8.2 Hazardous substances

Under no circumstances should group policy permit the carrying of chemicals, flammable substances or liquids, gas bottles, pesticide or herbicide containers or other dangerous goods in group vehicles.

It is essential that, if these substances are to be transported, they be only transported in a trailer.

The storage of such items will normally be the responsibility of the landholder or project partner. Should it become necessary for the group to store hazardous substances between projects (e.g. LP gas), a secure location, only accessible by authorised personnel, must be used.

The management committee must ensure that Hazchem placarding is displayed appropriate to the nature and quantity of any hazardous material being stored.

Groups should not permit volunteers, workers or project participants to handle, transport, or work in the immediate proximity of asbestos or highly toxic rabbit fumigation tablets (eg. Phostoxin or Lavacide).

2.9 Specific Projects

2.9.1 Sampling from road bridges

There are occasions when the group may need to obtain a water sample from a waterway and the only safe and feasible access is from a road bridge. High-flow river event monitoring is the most likely occasion for the use of a bridge, as the bridge is then safer than the bank. This is a high-risk activity and should not be undertaken lightly.

- Each group needs to contact their regional Main Roads Department office to seek advice from Transport Planning and Development Control. Each region may have different policies that relate to the use of bridges and road reserves for water monitoring and sampling.
- In some regions a permit (Ancillary Works Exemption) is available to allow access to bridges. This permit will include the requirements for traffic control and notification. The permit may be issued for long-term use by a group.
- The regional Main Roads office will provide each group with its requirements for use.
- If a permit is granted, the following safety guidelines should be followed in addition to the Main Roads requirements:
 - Only use a road bridge for sampling if the bridge has a footway or footpath.
 - Ensure there are 'Workmen ahead' signs placed on the roadside 60-77m on either side of the bridge.
 - All personnel on the bridge should wear a high visibility vest.
 - Structure sampling procedures to reduce the amount of time spent on the bridge.
 - If possible, obtain a water sample using a rope and bucket as opposed to dangling fragile and delicate equipment into the water.
 - The size of the sample bucket used must be carefully tailored to suit the conditions of the waterway (e.g. water velocity, amount of debris), and of course the size and physical ability of the person undertaking the sampling. A smaller person would be unable to safely handle a large (20 L) bucket. Therefore a size limit on the sampling bucket should be in place, most likely 2 L or 5 L maximum. This is to avoid injury to the person sampling (e.g. rope burns, torn muscles).
 - Care should be taken when raising the sample bucket not to contaminate the sample with dirt or mud from a bridge pylon or support.
 - Have a spotter watching upstream to look for floating debris.



2.9.2 Sampling from rail bridges

Queensland Rail has stringent safety protocols in place and only in exceptional circumstances grants permission to sample from its rail bridges.

Do not sample from rail bridges

2.9.3 Sampling from dams, weirs and other controlled water bodies

Groups may need to sample from dams, weirs and other controlled water bodies. In these cases, each group will need to contact the local management authority. This authority may be the local council, or local water board or corporation. In some instances, the management authority will require the group to apply for an access permit with associated safety guidelines before the group may access the dam or weir. Other dams or weirs may not require an access permit. To determine whether a group needs a permit, the local authority must be consulted.

If access is permitted, all normal group safety procedures must be followed, in addition to any required by the management authority.

2.9.4 Sampling from marine and estuarine structures

Groups may need to sample from boat ramps, jetties or harbours. In some cases permission may be required to access these sites.

Public boat ramps are available for access, and volunteers should not need to obtain permission to use them, provided the group does not interfere with the public's use of the facility.

To access port authority-controlled facilities, the group will first need to contact the port authority to confirm their requirements. Some port authorities only require notification of testing.

Permission from Queensland Transport, Maritime Division is required if monitoring equipment is to be left on-site.

Many pontoons are privately owned and the owner's permission would be required to access the facility for monitoring.

2.9.5 Burning off

Groups will not participate in fire control operations or burning off.

Where a small fire is required for cooking purposes, a risk assessment must be carried out. In particular, measures must be developed to ensure that there is no escape of fire.

2.9.6 Seed collection

A common cause of injuries reported from seed collection projects is postural compromise, usually associated with reaching overhead for extended periods. Team leaders must monitor this risk carefully and ensure that there are frequent rests and task rotations.

Further steps to be taken to ensure the safety of seed collection projects include:

- liaison with the landholder to determine the safety of the work site
- checking of equipment
- not working beneath damaged trees or trees with hung-up limbs
- not climbing along slippery and elevated logs
- consideration of bag weight and distance to vehicle when carry bags are full of seeds or capsules
- wearing gloves when using secateurs
- wearing safety vests and hard hats at all times when picking along roadsides or in areas of motor traffic movement
- wearing hard hats when collecting in areas where trees and seed sources are above head height
- arranging the placement of appropriate signage to alert motorists of workers near the roadside. State regulations may require an appropriately trained and accredited person to do this
- maintaining a safe working distance between pickers (2-3 m recommended)
- reporting faulty equipment.



2.9.7 Working at heights and use of ladders

Whenever a project requires work to be done from a ladder, roof or other elevated workstation, a comprehensive risk assessment must be undertaken to ensure adequate risk controls are put in place. The following minimum standards will apply to any such work.

- An approved fall-arrest device or guard rail must be used whenever the fall height for any worker exceeds 2 m and people will be within 2 m of an unguarded edge—the ‘2x2 rule’.
- A person should always have two hands free to ascend and descend a ladder.
- Ladders should be secured against movement and be supported on a firm, level, and non-slip surface.
- All work from a ladder should be performed while facing the ladder.
- A person’s feet should not be higher than 900 mm from the top of a ladder.
- No task should require overreaching (i.e. the belt buckle of the worker should always be within the stiles of the ladder).
- No person on a ladder should work directly above another person.
- Only one person should be on the ladder at any time.
- Ladders should not be used in access areas or within the arc of swinging doors.
- Work involving restricted vision should not be performed from a ladder.
- Small, light loads of tools or materials, easily handled by one person, may be raised or lowered with a handline.
- Ladders must not be handled or used where it is possible for the ladder or the user to come into contact with electrical power lines.
- The use of power tools while working on a ladder should be avoided, and must be restricted to those that are easily operated with one hand.
- Single and extension ladders should be placed at a slope of 4 to 1 and be footed or secured top and bottom. That is, for every 4 m of height the ladder should be 1 m away from the wall or other vertical surface.

- The person working from a single or extension ladder should be able to brace themselves at all times.
- Stepladders should only be used in the fully opened position.
- A stepladder must not be used near the edge of an open floor or penetration where, if the ladder toppled, a person could fall over that edge.

2.9.8 Contact with animals

In order to ensure that group workers demonstrate best practice in regard to minimising environmental impact and minimising risk to people, any contact with animals must be carefully controlled.

Research/data collection projects

Volunteers may only pick up or handle animals as part of an approved research or data collection project. In such cases the management committee must arrange for the project partner to provide appropriate training and personal protective equipment.

Unplanned contact with animals

Where birds, reptiles or other animals are encountered during projects, volunteers should be instructed not to feed, pick up or otherwise handle them. Under no circumstances should a team leader pick up a snake or other native or exotic creature for the purpose of entertaining volunteers, or permit any volunteer to do so.

3. Workplace health and safety guidance notes



These workplace health and safety guidance notes are designed to help group *management committees* and *team leaders* implement their safety policy correctly. The guidance notes give expanded directions on a range of safety topics including accident reporting and risk assessment.

	Page
Accident / incident investigation report	3:1
Risk assessment process	3:2
Insurance	3:7
Water safety	3:8
Processing workers, compensation claims	3:10
Handover to new or replacement team leader	3:11
Preparation for remote or isolated projects	3:12
Providing toilet facilities at project sites	3:13
Cyclone preparedness	3:14
Bushfire preparedness	3:15
Working with schools	3:16
Pre-existing medical conditions	3:17
First aid kits	3:19
After-hours contact responsibilities	3:19
Pre-departure vehicle safety check	3:20
Lightning and electrical storms	3:22

WH&S Guidance Note 1 *Accident /incident investigation report*

Purpose

The purpose of this report is:

- to **record information** regarding serious incidents. This may be needed for workers' compensation or some other legal purpose. This information also enables the group to analyse data for the purpose of identifying the need to amend policies or procedures
- to prompt and document the **actions taken to prevent a recurrence** of the incident reported. Every serious incident is an experience from which the group must learn, and this process is the important transition from being reactive (immediate response to the incident) to proactive (putting measures in place to prevent injury in the future). The purpose is not to assign blame.

Timeline

A copy of the accident/incident investigation report form should reach the management committee within 48 hours of the incident. This is necessary so that the group can comply with workers' compensation requirements, but prompt processing is also an acknowledgment that the group is responsive to serious incidents and injuries.

Who does what?

The data—the incident/injury reporting is the responsibility of the team leader or workplace manager. The injured person should not complete this form. The form must be completed promptly, accurately and completely. No relevant space should be left blank. The data the group has to analyse is only as good as the information that is provided.

The investigation—no injury is acceptable, so at various levels within the group, three key questions must be asked in relation to each injury reported.

- *What could I have done to prevent this from occurring?*



- *What could I have done to reduce the seriousness of the incident?*
- *What will I do, or have I done, to prevent this from happening in the future?*

These questions need to be considered by the four people who sign the form, and examples of possible responses are:

- the *injured person*: personal responsibility, following direction, wearing PPE.
- the *team leader*: clearer direction, tighter supervision, better task allocation etc.
- the *management committee*: improve project selection, staff or volunteer induction etc.
- the *regional or parent body*: review policy, induction resources, advice on procedures etc.

These people are encouraged to consult others if they are unsure what they could have done differently.

What to report

Clear explanatory notes are written on page two of the form.

If a team leader needs to transport a team member to hospital, or arrange an ambulance to do this, the management committee must be advised by phone immediately.

What not to report

Minor first aid cases—these are recorded by the injured person in the register of injuries.

Unsubstantiated medical treatment cases (MTC)—this is when someone reports having received medical treatment for an injury they claim was work-related, but does not provide verification (e.g. doctor's certificate). Obviously, if the team leader has personally taken someone to a doctor or hospital the medical treatment is verified. Alleged medical treatment cases without witnesses or doctor's verification may still be recorded in the register of injuries.

Unsubstantiated lost time injuries (LTI)—as above. An injury or illness is not classified as an LTI unless there is a doctor's verification that the absence had a work-related cause. Absences without verification are simply sick days.

Where to send the report

The team leader must send the report to the management committee at the regional office as soon as reasonably practicable (same day if at a project location with a fax available; the end of the week, at the latest, if there is no access to fax). Team leaders should not send reports direct to the regional or parent body. Check for completeness and accuracy before sending.

The management committee should, as a general rule, attempt to process the form, including discussing the incident with the team leader, on the day the report is received. This will demonstrate that the group really does see MTCs as serious; delays suggest that responding to injuries is not a high priority. If in any doubt, verify that it is a medical treatment or lost time case as these events are defined on the form. Once the management committee has completed the investigation at the regional level, the form should be finally checked for accuracy and completeness then sent to the regional or parent body.

The form should be faxed to the regional or parent body and the original retained with the project file at the regional office. It is not necessary to then mail the original.

WH&S Guidance Note 2 Risk Assessment Process

Risk assessment is a process that should take place before and during any activity that a monitoring group is undertaking. The process is not that hard, it is simply a look at what can go wrong, both before and during an activity, then deciding on methods to prevent or minimise the potential problems.

As an organiser or facilitator of an activity in which the group encourages other people to participate, the group owes those people a duty of care. The expectation is that the group will take reasonably practicable steps to protect them against reasonably foreseeable accident or injury. In simple terms this means look ahead, foresee how people could be harmed, then put in place measures to prevent that from happening.

The group must manage the exposure to the risks associated with all hazards at group workplaces. For the purposes of this manual, a workplace or work site is any site a team of volunteers goes to for the purpose of water quality monitoring.



A risk assessment process must be undertaken prior to work commencing on any project. Hazards must be identified and pointed out to all team members and all risk control measures explained and documented on the project risk assessment form. A risk assessment process must be completed for each new work site or for every change in activities taking place.

The management committee, through close examination of project application forms and liaison with landholders or project partners, must assist team leaders to plan risk management strategies. These strategies are expressed in terms of the actions that will be taken to manage the hazards and risks identified. Comments like ‘awareness’, ‘use common sense’ and ‘be careful’ do not describe adequate risk control strategies. Team leaders should frequently refer to the ‘safety prompts’ contained in section 4 of this manual for further assistance.

Once hazards are identified, the following risk control strategies must be considered in sequence:

- elimination of the risk—in principle, the most effective control would be to eliminate the hazard
- engineering control—a range of engineering measures might be used to remove or reduce exposure to a hazard, for example, containment or isolation of the hazard
- procedural control—reduced exposure to the hazard can be achieved through procedural or administrative controls
- personal protective equipment (PPE)—examples of PPE include protective clothing and footwear, gloves, and hearing, eye and face protection. The use of PPE should not be regarded as an alternative to engineering or other options for controlling exposure.

Consideration in regard to PPE should extend beyond the obvious hats, boots and sunscreen to include items like gaiters in snake habitats and kneepads for work involving constant kneeling.

Unacceptable risk

Where the risk assessment leaves the team leader in any doubt that the project can proceed safely, the team leader should immediately suspend work on the project, or that component that is of concern, and immediately consult with the management committee.

Terminology

Two terms are used during risk assessment:

Hazard—anything that could cause harm. This could be, for example, cold water, slippery slopes or dangerous animals.

Risk—the chance, high or low, that someone may be harmed by a hazard.

The most important part of risk assessment is the decision about whether a hazard is *significant*. This determines the measures needed to *minimise* the risk to acceptable levels.

Carrying out risk assessment

Without our even realising it, risk assessment is a part of everyday lives. When a person waits to cross the street, they check for oncoming traffic and consider a number of factors. How fast is the traffic moving? What is the weather like? If it’s raining, it may take longer for a vehicle to stop. Using this, other information gathered, and early childhood training, each person makes a decision about the safety of crossing the street here or the need to move to a safer location.

This is an example of an informal risk assessment. The formal process as it applies to water quality monitoring programs is not much different.

The following steps summarise a simple risk assessment process. (The questions are examples and not an exhaustive list.)

- **Consider the site**—Is it rough, steep, rocky, slippery, dusty, exposed to sun or wind? Is it thickly vegetated? Are there overhanging dead branches? Are there likely to be snakes, bees, wasps, bull ants or spiders? How far is the team from emergency assistance if required? It may be an idea to ask another person for their opinion. They may see a hazard that the team leader has overlooked. Brainstorming can be very effective in gathering information from diverse groups of people.



- **Consider the tasks** to be undertaken—Do people have to carry heavy or awkward objects? Will they be swinging tools? Will they be handling chemicals? Will they be working near machinery or cliffs or roads or dangerous water?
- **Consider the people**—Are they skilled and experienced in the work to be done? Are there children who require close supervision? Are there older people who are less agile? Do any of the people have pre-existing injuries or medical conditions that could be aggravated by doing the planned tasks?
- **How could a person be injured?**—Think about ‘these people doing these jobs at this site’. Consider trips and falls, bites and stings, sunburn and dehydration, back or shoulder strains arising from heavy lifting or from overuse or misuse of tools, or eye injuries caused by twigs or spikes.
- **Identify risk control strategies**—What will people do, or not do, in order to minimise the chance of harm? Involve everyone in the process. Use all the eyes and experience the group can offer. Jot down the agreed strategies on the risk assessment form. Make sure everyone understands what is expected of them. Use the safety prompts (section 4) for assistance in this task.

- **Supervise and monitor** to make sure everyone is sticking to the ‘rules’—Some tasks or people might require closer supervision than others. Be prepared to change any strategies that don’t seem to be working.
- **Emergency response plan**—Make sure the team has emergency contact numbers, and ensure everyone knows what to do in the event of an emergency.

To ensure accountability and availability of the risk assessment findings the team leader must:

- **Record the findings**—the team leader must inform those taking part in the project of the findings and the steps taken to reduce the risks. A risk assessment form is used for this.
- **Review the assessment and revise if necessary**—in all cases it is best to review risk assessments from time to time, and particularly when new volunteers join the group or when a new hazard is identified. The review process is essential to ensure the risk precautions are still effective.

A project risk assessment form is included in this manual and should be used for every project and work site a volunteer group is involved with. The team leader should facilitate the risk assessment process. The team leader does not need to do the actual writing on the form, but does need to read and sign the completed form before any work can commence.

The project risk assessment form is used to guide and record a process of systematically assessing risks and formulating appropriate risk management strategies. The important thing is the process. The form itself will not keep people safe, but it is important evidence that the group has responsibly assessed risks related to the work to be undertaken.

	Consequence				
Likelihood	Insignificant – 1	Minor – 2	Moderate – 3	Major – 4	Catastrophic – 5
Highly unlikely – 1	1 – low	2 – low	3 – low	4 - moderate	5 – high
Unlikely – 2	2 – low	4 - moderate	6 - moderate	8 - high	8 - high
Quite possible – 3	3 - low	6 - moderate	9 - high	12 - high	15 – extreme
Likely – 4	4 - moderate	8 - high	12 - high	16 – extreme	20 – extreme
Almost certain - 5	5 - high	10 - high	15 – extreme	20 – extreme	25 - extreme

Extreme risk—**Do not proceed**

High risk — requires consultation with the management committee

Moderate risk—team leaders with less than three months’ experience should consult with the management committee

Low risk—standard on-site risk assessment



For each hazard identified, a level of consequence and its outcome should be evaluated. These range from:

Level	Descriptor	Outcome description
1	Insignificant	No injuries
2	Minor	On-site first aid treatment
3	Moderate	Medical treatment required, loss of time
4	Major	Serious injury, hospitalisation
5	Catastrophic	Death, permanent disability

Also, for each hazard, a level of likelihood of the hazard occurring should be gauged.

Level	Descriptor	Probability description
1	Highly unlikely/rare	Remote possibility (less than once every 5+ years)
2	Unlikely	Not expected to occur (may occur every 1–5 years)
3	Quite possible	Occurs occasionally (monthly – yearly)
4	Likely	Occurs regularly (weekly – monthly)
5	Almost certain	Expected to occur (daily – weekly)

A risk score is obtained by multiplying consequence x likelihood. The risk score can then be used to arrive at a risk rating.

When a *new risk* is identified, appropriate control strategies should be determined and a new risk cell on the form completed and dated. In this way the project risk assessment can continue to grow as the project proceeds.

When starting a *new task* at the same site, just add any risks associated with the new task to the existing form.

When starting the same tasks at a *different site* add the new ‘locational’ risks in additional cells. Also complete the location reference points and emergency contacts with the applicable dates.

Precise project location reference points are essential so that emergency services can be provided with accurate and concise directions to the project site. **It must always be remembered that the team leader may not be in a position to speak with emergency services and another person may have to provide directions.**

Emergency contact details

The national ‘000’ emergency number should be backed up with local emergency service numbers and the ‘112’ emergency number for mobile phones.

Examples

(1) Following is an example of risk assessment for a team carrying out water quality **testing at an exposed rocky seashore**. The site is exposed to high waves and winds.

Risk identified: *Slips, trips and falls – Team members washed off rocks*

Likelihood Quite possible 3

Consequence Catastrophic 5

Risk score Likelihood x consequence =15 — Extreme Risk

Risk controls Consult with the management committee as to whether to proceed—Unlikely

If it does proceed all team members to wear buoyancy vests and carry personal beacons

Lifeboat to stand offshore at all times.

It is possible to see from this example that it becomes prohibitive to work in some situations where safety may be compromised. In this example it is unlikely that a volunteer team would continue with the project.

(2) In almost all projects there is a need to travel by vehicle to the project site. Following is a risk assessment for **vehicle travel**.

Risk identified: *Serious road accident*

Likelihood Unlikely 2

Consequence Catastrophic 5

Risk score Likelihood x consequence = 10—High Risk

Risk controls Pre-departure vehicle test

Compliance with state speed limits and regulations

Wear seatbelts at all times vehicle is in motion

Ensure all arms and legs are within the vehicle

Reduce in-vehicle distractions to driver

Travel at a time of day to reduce glare and fatigue



While vehicle travel is considered a high-risk activity, it is essential and so the risk is managed by engineering control, procedural control and use of PPE.

Generic risks associated with waterway monitoring

Faunal risks

- Snakes
- Crocodiles
- Spiders
- Insects
- Nesting birds
- Stock and farm animals
- Marine stingers

Floral risks

- Stings from plants
- Allergic reactions

Environmental

- Air temperature – hot or cold
- Solar radiation
- Heavy rain
- Wind
- Water current
- Water temperature – hot or cold
- Artesian wells – hot water

Mechanical

- Vehicles
- River crossing in vehicles

Gravity

- Slips, trips or falls of person
- Working at heights
- Falling objects

Access

- River banks
- Steep
- Slippery
- Uneven ground
- Scrub

Substances

- Chemicals – MSDS needed
- Single or long-term contact
- Biological
 - Fungal
 - Bacterial
 - Viral
 - Parasitic

Kinetic

- Hitting an object
- Being hit by an object

Manual handling

- Lifting, carrying or putting down objects
- Lifting artesian well covers

Location

- Urban versus rural sites or groups
- Road sides
- Bridges
- Heights

Guidelines for appropriate personal protective equipment (PPE)

This list, while extensive, is not exhaustive.

- Long-sleeved shirt
- Long trousers
- Socks
- Enclosed footwear
- Dive boots
- Wide brimmed hat
- Sunscreen
- Insect repellent
- Gaiters
- Gloves
 - heavy work gloves
 - latex
 - non-latex — include: Ansell Dermaprene, Baxter Duraprene and J&J Allergard
 - rubber/chemical use
- Face mask
- Safety glasses
- Sunglasses
- Life jacket
- Personal locator beacons

Each group must make sure:

- the PPE is appropriate
- volunteers are instructed in correct use
- PPE is worn and/or used as necessary
- PPE fits correctly
- PPE is properly maintained and stored.

Training

Each monitoring group may need to undertake training and ensure relevant training is available for its workers.

- Induction training
- Specific hazard training
- Ongoing training
- Emergency procedures training
- First aid training
- Safe tool use training
- Defensive driving training



WH&S Guidance Note 3 *Insurance*

The Department of Natural Resources and Mines (the department) provides an insurance package comprising Public and Products liability, Personal Accident and Association liability for all registered community Natural Resource Management (NRM) groups including community-based waterway monitoring groups.

It is of course desirable in all circumstances to avoid injury and accidents wherever possible. This manual outlines methods of reducing and managing risks. If, however, after risk assessment and management, an accident occurs, groups are insured for a range of activities.

Activities covered

The insurance policies cover volunteer natural resource management (NRM) activities, including but not limited to:

- Meetings
- Workshops, lectures, seminars
- Office occupancy
- NRM education
- Fencing
- Water monitoring
- Rubbish collection
- Weed control
- Planting activities
- Displays
- Vegetation monitoring
- Track construction and maintenance
- Production/distribution of newspapers and flyers
- Field days
- School visits
- Bus trips
- Camping trips
- Fauna monitoring
- Research
- Seed collection or propagation
- Erosion control
- Business not exceeding \$100,000 gross revenue.

Other activities

If your group runs any other activities that are not listed above or do not relate to NRM, the terms and conditions of this insurance will most likely not cover those activities.

This does not mean that your group cannot continue with these activities. It does, however, mean that the non-NRM related activities in which your group is involved are not covered by this insurance arrangement.

Business units and commercial enterprises

Similarly, if your group runs a commercial or business unit which earns over \$100,000 in gross revenue, the commercial activities in which your group is involved are not covered. Government grants (e.g. Envirofunds or Natural Heritage Trust) and commercial sponsorships are not included in calculating 'Gross Revenue'.

If you have any concerns about activities that are covered under the insurance, contact the department's Capacity Support Officer on 07 3239 3860.

Exclusions and conditions

All insurance policies have exclusions (activities and events that are not covered) and conditions that must be complied with. If your group conducts an activity which is not eligible under the insurance policies, or does not meet the conditions of the policy, any claims will likely be rejected. It is the group's responsibility to be aware of the policies' current exclusions and conditions.

For more detailed information about conditions and exclusions, contact the department's Capacity Support Officer on 07 3239 3860.

Obligations

- Groups must not engage in activities which breach the conditions for insurance coverage.
- Groups must comply with any future amendments to insurance coverage.
- The group's executive must maintain awareness of approved activities.
- Groups must maintain accurate records of decisions made to hold each activity.
- Groups must maintain accurate records of individuals participating in group activities.
- The group's executive must inform all initial and new members and volunteers of the group about the terms and conditions the insurance policy.
- Groups must inform the department immediately of any of the following:
 - if they have entered into, or propose to enter into a contract which might limit their right of recovery against another contracting person



- any facts which might give rise to a claim against them
- any change of address or location
- any change in activity or activities or the commencement of new activities, including but not limited to changes in the nature of existing activities
- installation of plant or equipment
- hiring of any plant, equipment or personnel
- any contractual liabilities or granting of indemnities
- alteration, amendment to or disconnection of fire or burglary protection systems on relevant premises
- acquisitions of new companies, mergers or joint ventures.

3-8

Claims

Liability claims are based on the alleged negligence of the insured.

As soon as you become aware of any, or any potential claim you should contact the department's Capacity Support Officer on 07 3239 3860. If this person is unavailable, then please contact the insurance policy account executive from AON Risk Services on 07 3223 7513.

You must not admit liability for, or offer or agree to settle any claim or authorise the repair or replacement of any property. Any discussion with third parties may result in the claim being void.

Enquiries

While all care has been taken in the preparation of this material, this insurance summary is a guide and has been prepared to provide general information only. It is not intended to be a substitute for legal or other professional advice.

If you have any queries regarding the policies, including conditions, exclusions and activities covered, or would like a certificate of currency, please contact the department's Capacity Support Officer on 07 3239 3860.

WH&S Guidance Note 4

Water Safety

Purpose

To ensure the safety of all personnel working in or near the water.

No task is so important that safety can be compromised

If a toxic algal bloom, sewage spill, waterborne disease, chemical spill or fish kill is suspected at a monitoring site—**DO NOT ENTER THE WATER**. Immediately contact the Environmental Protection Agency for further advice.

Swiftly moving, deep or very cold water presents serious risks to personnel involved in water monitoring. Only when it is not possible to gather samples from the relative safety of dry land should people enter the water, and only then, when the risk assessment indicates it is safe to do so. Even relatively shallow streams are potentially hazardous in the event of a victim being unable to reach safety due to incapacity or injury. Do not enter floodwaters.

A fundamental aspect of water safety is the ability to swim. Swimming competence should be a prerequisite for personnel involved in projects where entry to the water is required. Team leaders should ensure team members can swim competently in open, natural water. Being able to swim in the temperature-controlled, still, clear water of a swimming pool may not guarantee competence in a cold, murky current.

All personnel should be aware of the dangers of working in and around water and should be familiar with the use of PPE. Wear only wet boots or reef boots in a stream that is deep enough to require swimming. Do not wear work boots unless working in shallow, still water. Do not enter the water barefoot, as the risk of injury due to sharp items is high (e.g. broken glass, jagged metal, fish spines). Do not wear raincoats, waders or any clothing that makes swimming difficult when in deep water. Ensure at least two members of the team are proficient in recovery and resuscitation techniques.

High flow rates, slippery or irregular streambeds, snags, whirlpools, floating debris and cold water are all hazards. Navigable streams present an additional hazard to a monitoring team with river traffic, or the hazard that the monitoring exercise



may present to river users. Poor weather conditions and darkness pose additional hazards, and extra caution is essential under such conditions. Always err on the side of safety where any doubt exists.

Fences are one of the most dangerous hazards in a flood—the person who has fallen in and is otherwise okay runs the risk of being snagged on barbed wire or tangled in wire, and this could lead to the drowning of an otherwise strong swimmer. Therefore, if there is a choice, always sample downstream of fence lines that run across streams.

If a person does fall in the water, the best approach is **not to panic**, don't fight the current, and swim carefully across the stream towards a bank. This may mean a trip downstream due to the current, but will result in a safe ending.

Wading

Wading in stationary or flowing water is hazardous when the depth or current are excessive.

Assessing the situation

- Do not enter the water if it is believed crocodiles inhabit the waterhole.
- Water depths are often deceptive and the force of flowing water must not be underestimated. A useful guide to an upper wading limit when carrying out monitoring is: *'When the depth of water in metres, multiplied by the velocity in metres per second exceeds one, the river should be assumed to be difficult to wade'*. For example, in a stream of one metre depth, flowing at a rate of two metres per second, wading would be considered unsafe. Flow rate can be estimated by timing a stick floating between two fixed points. At lesser depths and velocities, the river may be unsafe to wade due to site conditions and the individual's capabilities.
- A tagline or rope fixed to the bank may be carried as a safety line, but it must not be tied to the person. Once fixed securely to both banks, this line can serve as a useful support, providing it is only used while standing on the downstream side.
- If required to cross a river or stream, suitable fording places may be found:
 - where the river widens or divides—at these places the water often flows quietly, is shallow and clear

- at a single bar above shallow rapids
- between river bends—deeper water and stronger currents occur on the outside bank of a curve.

- If no shallow ford is available, select a slow-flowing pool to swim across.
- Find a ford where the riverbed has a smooth shingle bottom. Avoid boulders, logs and smooth rock slabs. It is worth spending time looking for the best place to cross. A bad ford is a side stream close to a swiftly flowing river, or where the runout below the ford has dangerous rapids, bluffs, deep holes or obstacles. Remember downstream hazards should be taken into account when selecting a safe ford.

Appropriate equipment

When water temperatures are low, waders can be used in shallow water. Waders and gumboots should not be used where deep water exists and the flow rate has the potential to carry a person who has fallen over, unless the person wears a self-inflating vest flotation device. Wetsuits should be used during a deep monitoring in cold water. Be aware that even relatively warm water can cause hypothermia to people immersed in it for long periods of time.

Wading technique

Study the river and select the safest crossing point. Usually the best method of crossing is to face the opposite bank and move directly across or diagonally downstream. Take short shuffling steps, keeping feet low. Feel with the boots or probe with a pole for obstacles or change of slope. Brace against the current. Keep calm and don't rush. If wading at this section is too difficult, another method should be used. Safety must not be sacrificed in the interest of job expediency.

Resistance to the flow can be minimised by standing side-on to the current, and support can be gained by using a rod or a pole on the upstream side when monitoring.

If in doubt, DO NOT CROSS THE STREAM.

**Personal safety
comes first**



Acknowledgment: WH&S Guidance Note 4 adapted from *Hydrographic Procedure—Safe Working Practice for Hydrographers*, January 2004, G C Long (1986), D G Alexander (Revised 2004), Department of Natural Resources and Mines, Queensland. Permission obtained for this purpose.

Marine and estuarine sites

Marine and estuarine sites pose extra safety hazards that need to be assessed and managed. These sites are subject to tidal influences and therefore monitoring groups need to check current tide timetables to avoid being trapped by rising or falling tides.

Marine stingers may be a hazard that can be avoided or reduced by not entering the water in the stinger season or by wearing wetsuits or stinger suits while in the water.

The hazards from marine predators, sharks or crocodiles should be minimised by avoiding the water in known shark and crocodile areas. Other animals to avoid include stonefish, stingrays, octopuses, cone shells and many spiny fish. Each group should investigate their local area and ensure adequate management strategies are in place to reduce the risk of injury.

The dangers of rocky shores are well-known, but are sometimes ignored. Large or ‘freak’ waves are often referred to in the media after someone has been injured or swept off the rocks. Each group should carefully assess the need for results as opposed to the need for personal safety before undertaking any monitoring on rocky shores. The risks of falling on sharp rocks, often with associated shellfish growth, the risks of being washed out to sea and the chances of encountering a local predator must be managed.

Mangrove environments are naturally dense and muddy and so can be hazardous sites. Personnel must work within tidal limits to avoid being trapped. Working and moving in the thick mud of a mangrove forest can be exhausting, so each group should manage the time spent in the forest to reduce fatigue. The mud in a mangrove forest can be very deep, and personnel should avoid

becoming entrapped in a ‘quicksand’ type situation. Slips, trips and falls can be common. Crocodiles also inhabit mangroves.

If a monitoring group is working from a boat, the group needs to ensure the boat is suitable for the area, seaworthy and carries all required safety equipment and life jackets for all team members. The person in charge of the boat should be appropriately licensed and experienced. Each group should check with the insurer prior to boating activities to ensure coverage is in place for that particular activity. The department’s insurance does not cover property damage to or caused by boats or vehicles. Each group will need to investigate this separately.

Professional fishermen who have set nets may also use estuarine and marine areas. These nets can pose a hazard to boating navigation and to personnel moving through mangrove forests. Nets usually have floating buoys attached. Teams should avoid these nets.

WH&S Guidance Note 5 *Processing workers, compensation claims*

Workers’ compensation claims may only be lodged by paid employees of the group. Volunteers do not carry workers’ compensation entitlements unless they receive some remuneration for their work (e.g. food or shelter).

The forms and documents required are:

- employer claim form and employee claim form—some insurance companies have combined the employer and employee claim form in one. Please ensure that the group has current forms in the office. Claim forms can be obtained from the nearest insurance office and generally from post offices
- WorkCover medical certificate (from an accredited WorkCover doctor)
- invoices/statements if applicable
- *the accident/incident investigation form relating to the injury should already have been faxed to the regional or parent body.*

Filling out the forms

Before forwarding to the regional or parent body, ensure that both the employer and employee forms are filled out correctly and signed by:

- the person making the claim
- the injured person’s supervisor.

Note: The section ‘Employer details’ is filled out at the regional or parent body offices.



Keep in mind that only originals of claim forms and invoices/statements can be sent to the insurance company.

The group accident/incident investigation form is an internal document that is not forwarded to the insurance company; this may therefore be faxed to the regional or parent body without the need to also send the original. This should be retained at the group office.

Minimising delays in processing claims

- Each office and each team leader should have claim forms with them, so that claims can be completed and lodged at the regional office immediately.
- Regional offices should check all details and forward to the regional or parent body **on the same day** the claim is received.
- The regional or parent body processes claims, enters details on the group database and forwards the claim forms to the insurance company **on the same day** the claim is received.

Advice to people lodging a claim

Managers should provide the following information to anyone wishing to lodge a claim:

- The acceptance of a claim by the insurance company is not automatic. The company may elect to investigate the claim.
- Fortnightly wage payments may be suspended while the claim is being assessed. The group or the insurer will ultimately pay all wage entitlements, but there may be a period of delay.
- Some prospective employers may ask at interview for information about a job applicant's compensation claim history.

General information

- Workers' compensation insurance is maintained so that workers who genuinely suffer work-related injuries or illnesses are compensated for medical expenses incurred.
- The group does not pay very substantial premiums to cover expenses in relation to injuries arising from recreational or social activities.
- As with most insurance policies, there is an excess payable on each claim. In Queensland, the group is required to pay the first four days wages. False or improper claims can therefore be very costly to the group—money that could be used on other things.

- The employer's report should only state facts as the group knows them. The group should not presume to be medical experts and make statements such as: 'the staff member has a lower back strain as a result of constantly raking mulch'. This might more accurately be written as: 'the staff member complained of a sore back at the end of the day. His main task during the day had been raking mulch'.
- Invoices/statements will only be paid by the group once a claim has been accepted by the insurance company. If the injured person chooses not to lodge a WorkCover claim, they accept the responsibility for paying bills.
- The group should not immediately pick up payment of any bills because the group then risks being deemed to have accepted liability for the injury and all, including future, payments arising from it.

WH&S Guidance Note 6

Handover to new or replacement team leader

Purpose

To ensure that any new, permanent or temporary replacement team leader is sufficiently well-briefed and inducted to enable them to maintain the expected high standard of safety management.

General induction

Even short-term replacement team leaders need to be inducted into the group, and the specific project, in accordance with current induction guidelines.

Advisable qualifications

ALL team leaders are required to provide evidence of the currency of:

- full driver licence
- approved defensive driver training
- senior first aid or approved equivalent
- WH&S to Certificate 2 standard or approved equivalent.



Defensive driver training, first aid and WH&S qualifications should have been obtained within the last three years.

The replacement team leader must also receive:

- WH&S policy and implementation guidelines
- current risk assessment and necessary PPE
- team list, including notes relating to pre-existing medical conditions
- first aid kits, adequately stocked
- emergency response plan and relevant emergency contact details
- safety prompts (section 4 of this manual)
- project injury history, through copies of accident/incident reports and the register of injuries
- mobile phone or radio, and instructions for use
- explanation of vehicle operation, safety and maintenance expectations.

3-12

WH&S Guidance Note 7

Preparation for Remote or Isolated Projects

The term 'remote project' may be defined in different ways, but in general terms it refers to those projects that are at, or require travel through, locations that are not within easy contact or reach of emergency assistance. For group purposes, a project is deemed remote if at any time the team will be more than one hour's road travel from an ambulance or similar emergency assistance, but the considerations below should be applied to any project outside the urban area.

Reason for project

If remote projects have a potential to magnify safety, cost, management and emergency response issues, the group must consider the reasons for accepting such projects. *Why does the group want/need to do this project? Why choose this project over others? How does the group justify accepting the extra risks or demands?* The group needs to have thought this through.

Project location

The location of the project in relation to hospital or ambulance support is critical. Consideration also needs to be given to any social or cultural risks or challenges associated with the location.

Transport

As transporting teams to and from projects is generally a group's highest risk activity, it follows then that committing to more distant projects increases this risk, the risk being further increased where road surfaces are inferior. The suitability of vehicles includes consideration of mechanical condition and passenger comfort. All drivers should be experienced in the difficulties of off-road or four-wheel driving.

Leadership

The demands of 24 hour-a-day responsibility away from most regular forms of support and assistance require team leaders with exceptional people management skills and experience, above average technical and mechanical skills and proven safety management records. As the leader is also the driver, consideration needs to be given to the issue of fatigue, particularly in regard to the return journey.

Participants

Because of the difficulty in accessing support, participants need to be assessed to ensure they are socially, psychologically and physically suitable for a remote project. Careful attention must be paid to pre-existing injuries. They have the potential to create unacceptable demands on the team leader or undue stress on individuals who discover that they are unable to cope for whatever reason. *Is it reasonably foreseeable that sending this person might not be in their best interest and might also compromise the safety or enjoyment of the rest of the team? Might it be unfair on the leader?*

Communication

An obvious issue—the group needs to identify backup communication systems in case the primary form (e.g. satellite phone) is damaged or becomes unserviceable. Groups have had this exact experience in what was a life-threatening situation.

Risk assessment

This fundamental process becomes even more important where injuries are much more difficult to treat or manage. Relatively minor injuries like a foreign body in the eye, a broken tooth or a sprained ankle may present very stressful treatment



or evacuation challenges for the leader and other team members. What about a broken leg? ...an arterial bleed? ...an allergic reaction to a bee sting? ...an acute asthma attack? The risk assessment process must include consideration of worst case scenarios. *What is the worst thing that could happen? What am I doing to make sure it doesn't happen?*

After hours

Experience has shown that often the biggest challenge for team leaders comes after hours. The group, through the team leader, is still responsible for the safety of team members, so consideration needs to be given to the management of any foreseeable risks that might arise after hours. Risks are not foreseeable if the group doesn't stop to think about them.

Emergency response

Anticipating what could go wrong, and developing an appropriate emergency response plan, is essential. The key elements of this plan need to be written down and responsibilities assigned. Working through some worst case scenarios is essential. *What is the plan if the leader is seriously injured? What will the group do if such and such happens?* The best emergency response plans are the ones we don't have to use, so risk identification and management is still the foundation of a safe project.

Accommodation

Because a team may spend up to 60 per cent of its time in and around the accommodation, its suitability must be investigated and confirmed. It is unlikely that the team can readily come home or find alternative accommodation if the accommodation proves to be too cold, unhygienic or otherwise unsatisfactory. The team leader also needs to check that team members are equipped for, and comfortable with, the accommodation arrangements (e.g. they have sleeping bags if necessary).

WH&S Guidance Note 8

Providing Toilet Facilities at Project Sites

Many group projects will be at locations where permanent toilets are not available. In these instances the most practicable alternative must be identified, taking into account issues like the team size and gender balance, project duration, cost, project partner etc.

Options

- Arrange for a Portaloo™ or similar to be placed on site. This is not an unreasonable responsibility of the project partner, especially for longer duration projects. Portable toilets are generally readily available for projects with local government.
- Provide a custom-built camp toilet (e.g. Visapotty™ or Portapotty™) and toilet tent. The total cost is about \$300, which again is not an unreasonable request to many project partners, or may be built into the project budget for purchase by the group.
- Drive to a nearby toilet. This is generally not a long-term option in that it increases exposure to travel risks and compromises comfort and dignity.
- Construct a bush or pit toilet. Project duration is a factor, but where this is the most practicable option, the specifications described below should apply.

Constructing a bush toilet

Choice of site

The bush toilet should be:

- at least 100 m from any creek and 50 m from any track
- well-screened by a toilet tent, tarp, hessian or vegetation screens
- on an unobstructed and well-identified access path, especially if the toilet will be used after dark.

Toilet

- Dig the hole deep enough so that waste will be buried at least 20 cm underground. Allow for the fact that some soil will be added after each use.
- Leave a mound of soil to the side with a trowel for back-filling after use.
- Fresh toilet paper should be kept in a plastic bag so that it remains free from dirt and moisture.
- Used sanitary products should be placed in a paper bag inside a plastic garbage bag.



Wherever possible, provide sanitary disposal paper bags to save on excess use of toilet paper for wrapping. Dispose of the garbage bag in a garbage bin.

- Provide an 'engaged' sign or flag that signifies that the toilet is occupied.
- Team leaders should not assume that all team members are familiar with the 'routine' for using pit toilets. Instruction may be necessary.

Hygiene

- Provide liquid soap.
- Provide water for washing of hands. Suspending a jerrycan with a tap can make a bush tap, or a wine bladder can be filled with water above a sprinkler device made from a cut-off small plastic softdrink bottle with holes perforated in the base. The 'sprinkler' is filled from the tap but then provides a steady trickle so hands can be washed without wasting water.

Decommissioning

- Before vacating the site, the toilet must be filled and the soil packed down and covered with leaves or natural forest litter.
- Check the surrounding area for any toilet paper or paper towelling that may have blown away from the immediate site.
- Remove sanitary waste bag for disposal.

WH&S Guidance Note 9

Cyclone Preparedness

During the cyclone season in northern Australia, all group projects in the region should be developed in a way that will minimise the risks associated with cyclones. The planning should not only take account of the possibility of destructive winds, but also of flooding and storm surges.

General principles

- No group should be placed at risk or allowed to remain at risk during a cyclone or when a cyclone is approaching.
- Teams working in 'at risk' areas must have two means of communication available to them (e.g. phone and radio or phone and EPIRB radio beacon).
- Pre-cyclone season preparation is essential.

Pre-cyclone season preparation

- Contact the local SES coordinator and arrange for a cyclone preparedness talk or series of talks to staff and volunteers. This should also cover personal preparedness including home safety.
- Identify the most reliable local radio station that provides cyclone reports.
- Add to the internet 'Favourites' web sites that provide daily cyclone information, e.g. <www.bom.gov.au> (Bureau of Meteorology), or regular road condition reports, e.g. <www.racq.com.au>.
- Check that the roof and eaves of the office are secure.
- Secure or remove loose material that could be blown about during high winds.
- If in a storm surge area, identify the nearest safe high ground and the best route to it.
- Prepare an emergency kit containing a portable radio, torch, spare batteries, fresh water etc. Include canned food for residential project teams.
- Ensure that all staff familiarise themselves with the group and local emergency response procedures.
- Brief or train staff to understand that during the cyclone season, the possibility of a cyclone must be included in every project site risk assessment, and an appropriate evacuation plan developed and communicated to all team members.

General procedures

Cyclone watch

- Continue work, but monitor local radio for information updates.
- Ensure vehicle has sufficient fuel should evacuation become necessary.
- Check that the whereabouts of all staff, teams and team members are known.
- Check that the emergency kit is in the vehicle.
- Ensure that offices are tidy, and files and equipment are properly stored or prepared for removal should evacuation be necessary.
- Discuss evacuation plans with partner agencies.



Cyclone warning

- Cease work and evacuate the area, unless a risk assessment indicates that an evacuation may be more hazardous than sheltering at the project site.
- Monitor and act in accordance with police or Emergency Services advice.
- Send local volunteers home, unless an alternative refuge has been identified as more appropriate.
- Assign a staff member to accompany any volunteers being accommodated by the group.
- If office evacuation is necessary, secure all files, disconnect electrical appliances, turn off gas and secure the building.
- Advise the regional or parent body of the cyclone warning and which staff or teams are being affected.

When the cyclone strikes

- Remain inside and shelter in the strongest part of the building, usually an internal hallway or bathroom. Stay well clear of windows.
- If the building starts to break up, use mattresses, rugs or blankets for protection and shelter under a strong table or bench.
- Listen to the portable radio for updates and advice.
- Do not go outside until an official 'all clear' is given. Beware of the calm 'eye' of the cyclone.
- If driving, **stop**—well away from the sea and clear of trees, power lines and watercourses—but remain in the vehicle.

After the cyclone

- Listen to local radio and follow official advice.
- Check for gas leaks. Do not use electrical appliances that are wet.
- Beware of fallen power lines and damaged bridges, buildings and trees.
- Exercise caution to minimise disease risks arising from contaminated water supplies and damaged sewerage systems. Recognise that snakes and other confused and frightened animals may also have sought refuge in or around buildings. Local authorities will advise on the management of these risks.
- While minimising phone calls, team leaders should, at the first opportunity, check that all staff and volunteers are accounted for.

WH&S Guidance Note 10

Bushfire Preparedness

During the southern summer and northern dry season, the risk of bushfire must always be considered when volunteers are scheduled to work in areas with fire potential, for example, forest, grasslands and heathlands. A series of questions in the policy statement on bushfire safety (see 2.3.5, page 3–15) will help to guide management committees and team leaders through the important considerations.

General principles

- No group should be placed at risk or allowed to remain at risk during a bushfire or when there is a high fire danger. Completing a project is never a higher priority than the safety of teams.
- The group volunteers are not trained to fight bushfires. The group procedures are therefore aimed at removing teams from contact with bushfires.
- No state or territory is immune from the risk of bushfire.
- Teams working in 'at risk' areas must have two means of communication available to them (e.g. phone and radio or phone and EPIRB).
- Pre-bushfire season preparation is essential.

Preparation for the bushfire season

- Contact the local SES coordinator or Rural Fire Brigade and arrange for a bushfire preparedness talk or series of talks to staff and volunteers.
- Identify the most reliable radio station that will provide local bushfire warnings and reports.
- Add to the internet 'Favourites' web sites that provide daily weather information, e.g. <www.bom.gov.au> (Bureau of Meteorology), or regular road condition reports, e.g. <www.racq.com.au>.
- Ensure that all personnel familiarise themselves with the group and local emergency response procedures.



- Brief or train personnel to understand that during the bushfire season, the possibility of a bushfire must be included in every project site risk assessment, and an appropriate evacuation plan developed and communicated to all team members.
- Ensure that all personnel are familiar with, and understand, group emergency response and communication procedures.
- Ensure that vehicle exhaust systems and mufflers are checked and in good order so that they do not pose a fire risk when travelling through dry grass or scrub.

General procedures during the bushfire season

Management committee responsibilities

- Ensure that bushfire risk is discussed with project partners, and the outcomes of discussions are communicated to team leaders. Access to and egress from the project site must also be considered.
- Monitor daily news and Emergency Services reports.
- When briefing new volunteers or teams, stress that long clothing and woollen jumpers provide protection against radiant heat.
- Withdraw teams from high-risk areas on days of total fire ban.
- Advise the regional or parent body when there is a bushfire alert and which staff or teams may be affected.
- Ensure that the office knows the daily work site location for all teams.
- Ensure there is a mechanism for making immediate contact with project teams.

Team leader responsibilities

- Include 'bushfire' on the project risk assessment for all projects in forests, grasslands or heathlands.
- Contact the local Rural Fire Brigade senior officer for advice on whether to proceed with the project on high-risk days.
- Monitor local radio for weather and fire updates and reports, and act on any police or Emergency Services advice.
- Recognise the major bushfire risk factors—high temperature, high winds, low humidity and abundant dry fuel.

- Assess the risk at any site by taking account of the weather forecast and any current fire warnings, and by observing the environment and considering escape route options. Encourage all team members to advise the leader immediately anyone sees or smells smoke. North- and west-facing hillsides are likely to be drier and experience more intense fire.
- Ensure the vehicle has sufficient fuel to evacuate via the safest escape route.
- Check the muffler regularly, and remove dry grass from contact with the exhaust system every half-hour when driving through spinifex or other grass.
- Discuss an evacuation plan with project partner agencies, and ensure it is understood by team members.
- Apply the precautionary principle, and if in doubt about whether to withdraw from a work site, withdraw.

WH&S Guidance Note 11

Working with Schools

What a group can expect of schools

Whenever an organised school group participates in an activity with the group, the group can reasonably assume that the school is in compliance with the guidelines relating to school excursions that are laid down by Education Queensland (school councils, school boards).

In general terms these guidelines require that schools exercise their duty of care by:

- preparing students for the excursion—putting the excursion in a curriculum context and ensuring that students are appropriately dressed for the activities to be undertaken
- obtaining parental permission for students to participate in the activity
- staffing the excursion at a level that provides an appropriate staff-student supervision ratio—this will vary according to the location, the age of the students and the activities involved
- taking responsibility for the general discipline and supervision of the students, including the monitoring of students with special needs, including pre-existing medical conditions, and administering first aid
- providing an appropriate first aid kit. The group must also have a first aid kit that is appropriate for the group personnel involved
- ensuring that students are accounted for during and after the excursion.



What schools can expect of the group

Any joint activity involving the group and school children is more likely to be successful when there is clear and timely communication between the parties involved. In simple terms, be clear about who is doing what.

Schools can reasonably expect the group to assist this process by:

- complying with any state requirements in relation to police checks
- ensuring the school receives accurate information regarding the conservation objectives, the time and the location of the activity
- advising the school regarding any location- or activity-related risks, including advice on appropriate clothing and footwear
- confirming that the group expectations (above) will be met
- ensuring that the group personnel are neat and professional in appearance and conduct, engendering a sense of confidence and credibility (e.g. definitely no smoking within view of students, even during breaks)
- displaying good quality signage, as appropriate and available
- meeting the school group on arrival, and providing a project and safety briefing based on a standard group risk assessment. This may need to involve separate briefings for teachers and students
- ensuring that tools to be used are appropriate and in good condition.

WH&S Guidance Note 12

Pre-existing Medical Conditions

Once the group accepts a volunteer or employee, WH&S legislation requires that the group provide them with a 'safe place of work' and 'safe systems of work'. The group must therefore take into account any pre-existing injuries or medical conditions that have been declared when selecting participants, assigning tasks and deciding on appropriate work practices.

Collecting information

During the interview or induction for volunteers, the group must ask about any pre-existing injuries or medical conditions that may affect their capacity to work or that may be aggravated by the work that is foreseeable for them. The group needs therefore to provide sufficient information regarding the inherent requirements of the job to enable the volunteers to make an informed judgment about what conditions they ought to disclose. Once a condition or injury is disclosed, the volunteer should be further questioned to determine whether the group has the capacity to provide a safe working environment for that person.

The group must carefully check that any forms that request information about pre-existing conditions have been fully completed (e.g. volunteer registration form).

The question of pre-existing injuries or medical conditions will be prompted by the initial written application, but should be revisited at interview and induction.

Requesting further medical advice

Where uncertainty exists regarding the suitability of an applicant to participate in group programs, the group should require that person to obtain from their doctor a statement of their capacity or limitations.

Personal management plan

No volunteer who has declared a pre-existing condition should be assigned to, or accepted on, a project without first providing a management plan for the injury or medical condition that is acceptable to the group. This must be in writing, and a copy must be provided to the team leader. The group is then obliged to manage the volunteer in accordance with the plan, a course of action that best protects both the volunteer and the group.



'Outdoor' kit contents list

Qty	Description	Use
1	<i>Staying Alive</i> book (or equivalent)	Easy-to-read first aid book
2	Dressing universal large	Bleeding control
4	Pad non-adherent 7.5 cm x 10 cm	Wound cover
2	Pad non-adherent 7.5 cm x 20 cm	Wound cover
1	Dressing length 7.5 cm x 1 m	Minor wound cover
1	Shapes adhesive in bag x 50	Minor wound cover
1	Shapes knuckle in bag x 10	Minor wound cover
2	Skin closures x 5	Adhesive suture material
4	Pad eye large	Emergency eye cover
1	Sheet burns small	Non-adherent cover
2	Bandage conforming 2.5 cm	Secure dressings
2	Bandage conforming 5 cm	Secure dressings
2	Bandage conforming 10 cm	Secure dressings
2	Bandage conforming 15 cm	Secure dressings
1	Crepe heavy 10 cm	Support bandage
1	Tape, hypo-allergenic 2.5 cm x 9 m	Secure dressings
1	Tape, hypo-allergenic 5 cm x 9 m	Secure dressings
4	Bandage triangular 110 cm x 110 cm	For slings, padding etc.
2	Antiseptic steritube in bag x 2	Wound irrigation
4	Swabs gauze 10 cm x 10 cm x 5	To aid wound cleaning
2	Forceps - plastic	Aid sterile wound dressing
1	Dish - kidney plastic	Hold dressings or instruments
1	Pocket mask	Resuscitation
1	Cotton buds, sterile x 3	Aid wound cleaning
1	Soap antiseptic	Clean hands
1	Towels disposable in bag x 6	Drying hands
1	Nail brush	Cleaning hands
1	Scissors S/S - sharp/blunt 12.5 cm	Cut dressings/bandages
1	Safety pins in bag x 10	Secure bandages, dressings
1	Paracetamol tablets x 24	Pain relief
1	Blanket emergency shock	Retain warmth
18	Swabs alcohol	Skin cleaning
1	Gloves disposable in bag x 4	Hygiene
1	Forceps S/S - sharp 12.5 cm	Removing splinters
5	Splinter probes disposable	Removing deep splinters
3	Saline steritube 10 mL	Eye/wound irrigation



Emergency action plan

Where a pre-existing condition has the potential to lead to an emergency, an emergency action plan must also be provided by the volunteer and deemed acceptable to the group. The emergency plan must also be documented and provided to the team leader.

WH&S Guidance Note 13

First Aid Kits

Legal obligation

Occupational health and safety legislation requires the group to make adequate provision for the welfare of project participants. One aspect of this is the provision of first aid in the event of injury or illness.

The group offices and management vehicles are also workplaces, and must be equipped with suitable first aid kits. The provision of a first aid kit will also be a necessary consideration for any project team subgroup that may, for whatever reason, be working away from the main group.

Contents of first aid kits

Given the diversity of tasks, project locations, climatic conditions and participant backgrounds, no single kit will be exactly right for every project. An 'outdoor' kit, or a kit with equivalent contents, should be the standard group project kit.

Particular risks associated with certain tasks may also identify the need for additions to the kit, for example, the MSDS (material safety data sheet) for some chemicals may indicate the need for an eye module or a burns module. The team size, and distance or time from ambulance assistance, must also be considered when assessing the adequacy of the contents of a first aid kit.

It is important that first aid kits for project teams are readily transportable. It is not acceptable for the first aid kit to be secured in the vehicle when the team is working some distance away. The team leader may also need to carry an appropriate selection of items from the main kit in a belt kit, in order to be able to render immediate assistance.

The 'field' kit will generally be suitable for small teams, offices or management vehicles. Project and office first aid kits must also have in or with them a group register of injuries.

First aid training

All team leaders must have evidence of a current Senior or Workplace Level 2 first aid qualification.

Each group office should have a designated first aider who has a minimum Workplace Level 1 or

equivalent, the lower standard being acceptable at office locations due the closer proximity of medical assistance.

In general terms, first aiders should have the competencies necessary to enable them to render appropriate treatment for the types of injuries or illnesses reasonably foreseeable at their workplace.

WH&S Guidance Note 14

After-hours Contact Responsibilities

Purpose

An after-hours contact system is established for two primary reasons:

- to quickly avert or ease any pain, suffering or anxiety experienced by any person involved directly or indirectly with an emergency situation
- to provide effective support to any team leader or manager who is in the position of having to deal with an emergency.

The following guidelines complement the 'Emergency communication protocols', page 2–17. It must be remembered that these guidelines are prepared for the purpose of dealing with **emergency situations**, not routine operational matters.

An **emergency** may be defined as a situation where serious injury or significant property damage has occurred, or is at risk of occurring; where there is urgent need to contact a staff member or volunteer (e.g. serious illness, family bereavement or other family trauma) or where the image or reputation of the group is at risk.

In circumstances where the life or safety of any person is at serious risk, contact the appropriate emergency service immediately. If uncertain how or whether to proceed with an activity or project, do not proceed without first consulting the management committee or its nominee. The achievement of project outputs (e.g. water quality testing) should never become a higher priority than the safety of people.



Regional management units

An essential aspect of project development and implementation is making provision for emergency communication. In the event of an after-hours emergency at a project site, the team leader must be able to contact emergency services and the management committee or their deputy, and regional management staff must be able to contact the team leader. The regional or parent body must be part of the regional contacts network.

For this to work effectively:

- Team leaders must be provided with reliable after-hours contacts including both mobile and landline numbers for area and regional duty managers.
Responsibility: management committee to ensure all relevant contact numbers are on team leader's project report form.
- Management committee members must keep their phones turned on and with them, or ensure their after hours number is provided. When this is impractical, another staff member must be delegated this responsibility. If for any reason the management committee member's phone must be turned off or unattended for a short period, it must be checked regularly.
Responsibility: management committee
- Team leaders must keep their phones turned on, and with them, while they are on duty.
Responsibility: team leaders
- The regional or parent body duty manager must be provided, at the commencement of their duty period, with accurate contact details for area and management committees and team leaders including mobile, home and accommodation numbers. The regional or parent body needs to be advised of any change so that an accurate database, with an 'emergency contacts' field, can be maintained.
Responsibility: the regional or parent body administration coordinator

Regional or parent body after-hours duty manager

The primary role of the duty manager is to ensure that there is an after-hours referral point for emergency calls that come direct to the regional or parent body. It is most likely that such calls will be from families needing to contact volunteers, or from management committees seeking assistance or communicating details of a regional emergency.

For this to work effectively:

- Accurate contact details for the duty manager must be available on the after-hours recorded message for the regional or parent body.
Responsibility: the regional or parent body administration coordinator
- The duty manager must be provided with an accurate list of regional staff (including area managers) and team leader contact details including mobile, home and accommodation numbers.
Responsibility: the regional or parent body administration coordinator
- The duty manager must have their phone turned on and with them, or an alternative number must be used on the recorded message (e.g. home number). If for any reason the duty manager's phone must be turned off or unattended for a short period, it must be checked regularly.
Responsibility: duty manager
- If the duty manager, for whatever reason, will be unable to fulfil their duty on any night, a swap must be arranged, and the regional or parent body advised so the after-hours message can be altered accordingly.
Responsibility: duty manager must advise of changes. The regional or parent body administration coordinator to ensure message is changed.

WH&S Guidance Note 15

Pre-departure Vehicle Safety Check

It is a requirement that all group vehicles, including those on short-term hire, will be maintained and serviced in accordance with the schedule in the owner's manual. In further recognition that road travel is the highest risk activity undertaken by the group, a brief, but systematic pre-departure vehicle check must be undertaken by the driver at least weekly, or before each major trip. For many projects this will mean both prior to leaving for, and departing from, the project site. (See also 2.4 'Motor vehicle and road safety', page 2-13)



Engine oil

Make sure the vehicle is on level ground. Start the engine, let it run for a short while, then turn it off. While the engine is still warm, remove the dipstick, and wipe clean with a lint-free rag. Reinsert the dipstick fully to avoid a false reading. Remove the dipstick and check the oil level. If the level is low, top up the oil using the grade of oil recommended in the vehicle owner's manual.

Once or twice a month, depending on recent usage and road conditions, the engine parts and leads should be wiped with a dry, soft cloth.

Note: Do not run the engine if no oil is showing on the dipstick.

Radiator coolant

Check the radiator coolant level in the plastic reservoir (most vehicles have them). The level should be between the high and low marks. With the engine cool, remove the radiator cap and check the level in the radiator. If it is low, top it up with the correct coolant concentration, as recommended in the vehicle owner's manual. If the vehicle is regularly losing coolant, there may be a leak somewhere, which can cause problems. Have this checked by a mechanic at the earliest opportunity.

Check that the fan belt is tight and showing no signs of cracking or fraying.

Note: Never check the coolant level when the radiator is hot. Always make sure it is cool to avoid serious injury or burns. Never mix coolants or inhibitors of different brands.

Wires and hoses

Look for any frayed, damaged, loose or disconnected wiring. If any are found, have these checked by a mechanic.

Check all hoses and pipes. Follow hoses from one end to the other, making sure they are tight and there are no stains that could indicate a leak.

Check the top and bottom radiator hoses, heater hoses, fuel lines and any pipes associated with power steering or brakes. Arrange for a mechanic to replace any hoses that are very soft, kinked, swollen or cracked.

Brakes and clutch

Check brake and clutch fluid levels by looking through the see-through reservoirs. Fluid levels should be not more than 10 mm below the maximum level line. If top-up is necessary, use only fluids that are recommended in the owner's

manual. If any reservoir requires frequent topping up, arrange to have the system checked by a repairer without delay.

Check that there is minimal free movement in the pedals before pressure is felt, and that there is no increase in free movement since last operation of the vehicle.

Battery

If the battery has caps, remove them and check that the fluid inside is about 5 mm above the plates, or between the levels as indicated on the battery case. If low, top up with distilled water and avoid overfilling. Replace the caps and make sure the electrical cables are tight on the battery terminals. The top of the battery should be clean and dry.

Note: The battery is potentially dangerous, so do not check it near a naked flame or somebody who is smoking. Batteries produce an explosive gas when they charge, and the fluid inside is corrosive, so avoid any contact with eyes, skin, clothing and painted surfaces.

Windscreen and mirrors

Clean the windows to ensure optimum driver visibility. Check also that mirrors are clean and correctly adjusted.

Washer fluid—fill the washer bottle with clean water and the right amount of windscreen washer additive. Do not use household detergents as they may damage the paintwork and wiper blades.

Windscreen wipers—remove any leaves or twigs from the blades. Check the condition of the blades, and replace them if split, perished or not wiping the windscreen properly.

Tyres

Incorrect tyre pressure can reduce the life of tyres, and reduce road holding and braking capacity. Check and adjust pressure when tyres are cold and adjust the pressure as advised in the owner's manual. Run the hand lightly over the inside of each tyre to feel for cuts or bulges. The vehicle's correct tyre pressure may be found on the tyre placard on the inside of the glovebox or fuel cap filler, or inside the driver's door opening.



Drivers should check for a minimum tread depth of 1.5 mm on any part of the tyre surface that comes into contact with the road. Tyres have indicators in their tread pattern which show (as lines across the tread) when worn down to 1.6 mm. Check tyres, including the spare, for abnormal wear or damage such as cracks, bulges or tears.

Note: Each team vehicle should carry an accurate tyre gauge.

Lights

Make sure all lights are working, including high beam, stop and reverse lights and trailer lights. If assistance is not available, drive the vehicle up to a wall (or some reflective surface) and look for the reflection. Reverse to the same reflective surface to check rear lights.

Tools and spares

Check that the spare tyre has adequate tread, is inflated and securely in place. Check also that the jack and wheel brace and any additional spares required for remote area operation (e.g. belts, hoses, coolants and oil) are securely packed.

Note: Team leaders on remote projects must personally check that all necessary spares and recovery gear are in place.

Trailer

When a trailer is used, it should also be included in the above checks, (e.g. lights and tyres). Check also that the jockey wheel is serviceable and securely in place and that lids or doors are properly closed and secured. Check the trailer is correctly coupled and chained to the vehicle and electrical connection is firm and secure.

Acknowledgment: The above safety and maintenance check is based on advice from the NRMA (*10 Minute Maintenance Check*) and the RACV (*Preparing to Go*).

WH&S Guidance Note 16

Lightning and Electrical Storms

Lightning is an often underrated cause of fatality in Australia. Outdoor workers and sports participants are the most common casualties due to their reluctance to seek shelter during periods of electrical activity.

‘30-30 rule’

A flash-to-bang count of 30 seconds indicates that lightning is within 10 km. This indicates a very real risk that the next strike could be at the observer’s location. Activity should be suspended and the team moved to a designated safe shelter. The team should remain in the shelter for at least 30 minutes after the last lightning flash is seen.

Safe shelters

No structure is completely safe during a severe electrical storm, but some are safer than others. A large building, with electrical or telephone wiring and plumbing, is the safest shelter option. If there is no suitable building, the team vehicle should be used.

Unsafe locations

During electrical activity, the highest risk locations are open paddocks, beaches, open high ground, close proximity to the tallest structure in the area (e.g. tree, light pole), small structures such as picnic shelters and swimming pools.

Remember, DO NOT take cover under trees during an electrical storm due to both the possibility of falling branches and the increased risk of lightning strikes.

Landline telephones and umbrellas

Landline telephones should not be used during a thunderstorm, and umbrellas should not be used for shelter.

Acknowledgment: The above notes are drawn from advice provided by the Australian Bureau of Meteorology and the Centre for Sports Medicine Research and Education, Melbourne University.

4. Safety prompts



The safety prompts that follow are designed to assist team leaders with two critical safety management roles. First, they form a basis for developing risk control strategies as part of the standard risk assessment process. Secondly, they should form the basis of safety talks, although team leaders will almost certainly need to add to these prompts to take account of specific task, personnel or environmental factors.

These prompts represent the minimum safety points that must be communicated to all team members, and are intended to prompt the adoption of safe behaviours beyond, but including, the use of personal protective equipment (PPE).

The prompts cover the most commonly experienced risks and the most common tasks undertaken by community-based waterway monitoring groups. The lists are not exhaustive and are not intended to present every risk management strategy, nor be the technical manual for each task type. They do however represent minimum standards that apply. Every group volunteer must receive the same basic project safety induction. Team leaders need to feel confident that every volunteer is receiving consistent safety direction.

Safety prompts

	Page
Vehicle travel	4:3
Slips, trips and falls	4:2
Working in hot conditions	4:2
Working in cold conditions	4:2
Working in wet conditions	4:2
Working near water	4:3
Soil-borne diseases and infections	4:3
Bites and stings	4:3
Manual handling	4:4
Working in snake habitat	4:4
Working in crocodile habitat	4:5
Accessing rugged or isolated sites	4:5
Working with chemicals	4:6
Surveying and data collection	4:6
Working near roadsides	4:6
Working from bridges	4:6
Working near heavy machinery	4:7
Working at heights	4:7
Working with or near animals	4:8
Collecting 'sharps'	4:8

Safety Prompt 1

Vehicle Travel

Travel in vehicles is the highest risk activity in which community-based waterway monitoring group workers are involved.

Associated risks

Potentially fatal road accidents; head impact injury while entering or exiting vehicles; hand crush injuries from vehicle doors; travel sickness; fatigue.

Risk management strategies

- Undertake a vehicle check prior to departing to, and returning from, each project.
- Comply with all Queensland road laws and community-based waterway monitoring group policy.
- Drive in a manner that ensures that all occupants are safe, and feel safe. Vehicle occupants must advise the driver immediately if they feel unsafe.
- Wear seat belts, whenever a vehicle is in motion.
- Do not carry chemicals, unsecured tools, equipment or baggage in team vehicles.
- Do not allow arms, heads or any objects to protrude from the vehicle.
- Maintain conditions which optimise the comfort and concentration of the driver, e.g. minimise distractions, maintain ventilation, take regular breaks.
- Mobile phones should be turned off or not answered when traffic or road conditions demand the driver's total concentration.
- Hand-held mobile phones (i.e. phones without a hands-free kit or cradle) must not be used by any group volunteers and workers while driving.
- When travelling on dirt or rough roads, ensure the driver is experienced in four-wheel drive operation.
- The length of time each driver is control of the vehicle should be carefully monitored to reduce fatigue. The amount of on-site work the driver has participated in should also be considered.
- Consider the driver having lighter duties during the day to allow for their driving activities.
- Always leave any property gates as found—open or closed.



Safety Prompt 2

Slips, Trips and Falls

Associated risks

Twist injuries to ankles and knees; impact injuries, especially to backs, legs, hands, wrists, head and face. A sprained ankle, while not life threatening, may present a major evacuation problem at a remote location.

Risk management strategies

- Avoid any obvious hazards (e.g. slippery logs, loose rocks, steep embankments).
- Remove trip hazards from the work site (e.g. fill holes, remove unnecessary objects).
- Flag, or cordon off, immovable trip hazards.
- Allow at least 2 m 'visibility space' between team members when walking along tracks.
- Ensure that boots are firmly laced.
- Exercise additional caution when walking downhill (e.g. walk across the slope, have a strong leader control walking speed).
- Avoid carrying heavy, or awkward-sized, objects on uneven ground.
- Identify and closely supervise workers with pre-existing back, knee or ankle injuries.

Safety Prompt 3

Working in Hot Conditions

Associated risks

Dehydration; heat exhaustion; sunstroke; sunburn; skin cancer; cramps; skin irritation; falls or tool-use injuries associated with fatigue.

Risk management strategies

- Maintain hydration by providing adequate drinks and regular drink breaks.
- Take advantage of, or create, shaded work areas.
- Schedule, or reschedule, work to avoid heavy exertion during the most intense heat of the day.
- Reinforce the need for long trousers and long sleeves, broad-brimmed hats and sunglasses.

- Provide and encourage the regular use of SPF 30+ sunscreen on any exposed skin.
- Closely monitor team members for signs of fatigue, particularly those who are less fit, inexperienced or unacclimatised.

Safety Prompt 4

Working in Cold Conditions

Associated risks

Hypothermia; dehydration as a result of excessive perspiration under heavy clothing; loss of dexterity and fine motor functioning leading to reduced tool control.

Risk management strategies

- Make ample food and fluids available, including warm drinks if possible.
- Demonstrate and encourage simple warm-up stretches before commencement, and after breaks.
- Rotate tasks to avoid prolonged exposure.
- Identify shelter area and use this during periods of inactivity (e.g. breaks or extreme conditions).
- Structure work to avoid the coldest times of the day.
- Encourage team members to wear layered clothing that enables them to adjust their body temperature according to weather conditions and activity level.
- Wear a warm hat—the head is a major heat loss area.

Safety Prompt 5

Working in Wet Conditions

Associated risks

Hypothermia; cramps; slips, trips, falls; fatigue; loss of dexterity and fine motor functioning leading to reduced tool control; dehydration as a result of excessive perspiration under heavy or waterproof clothing.

Risk management strategies

- Schedule, or reschedule, work to avoid heavy exertion during the most intense rain of the day.
- Make ample food and fluids available, including warm drinks if possible.
- Rotate tasks to avoid prolonged exposure.
- Identify shelter area and use this during periods of inactivity (e.g. breaks or extreme conditions).
- Encourage team members to wear layered clothing that enables them to adjust their body temperature according to weather conditions and activity level.

- Encourage team members to use appropriate PPE (e.g. raincoats, hats).
- Encourage team members to have adequate spare dry socks or other clothes.
- Encourage team members to have a dry towel.

Safety Prompt 6

Working near Water

Associated risks

Drowning; risks associated with water or wetland habitat (e.g. crocodiles, mosquitoes, snakes); illness arising from waterborne disease or pollution; exposure to cold winds; sun glare and ultraviolet reflection. (See also ‘Bites and stings’, below; Working in hot, cold or wet conditions, page 4–5; ‘Working in snake habitat’, page 4–7; ‘Working in crocodile habitat’, page 4–5)

Risk management strategies

- Maintain a safe distance between team members and water that is deemed dangerous because of depth, current, murkiness, turbulence or difficulty of escape.
- Refrain from working on steep, slippery or unstable banks.
- Fence, flag or tape off high-risk areas.
- Identify non-swimmers and ensure that they are deployed away from higher risk areas.
- Where there is a possibility of the need to rescue someone from the water, ensure there are rescue aids readily accessible (e.g. rope, long pole, flotation device). Where there is a current, these aids must be positioned downstream of the most likely entry point.
- Formulate an emergency response plan that is based on non-contact rescue strategies.
- Maintain strict compliance with community-based waterway monitoring group’s policy of not facilitating recreational swimming.
- Encourage team members to have adequate spare dry socks or other clothes.
- Provide adequate washing facilities (e.g. soap and clean water).
- When working in marine or estuarine environments, have detailed information on the current tidal regime to avoid being trapped by rising or falling tides.
- When sampling at flooded waterways, always sample downstream from fences that cross the stream to avoid entanglements.
- When wading, always wear sturdy footwear to protect against the presence of broken glass.
- If a toxic algal bloom, waterborne disease, sewage spill, chemical spill or fish kill is suspected, DO NOT ENTER THE WATER. Immediately contact the Environmental Protection Agency for further advice.



Safety Prompt 7

Soil-borne Diseases and Infections

Associated risks

Soil-borne diseases such as Melioidosis in tropical regions; infection of existing wounds; gastric infections; respiratory complaints, e.g. asthma.

Risk management strategies

- Prior to project commencement, check with local health authorities if there are known soil-borne diseases in the project area.
- Identify any team member in higher risk categories (e.g. members with diabetes, lung or kidney disease or any open cuts or sores) and deploy them on an alternative task.
- Avoid skin contact with wet soil or muddy water by restructuring the task or by using impervious PPE.
- Cover any minor cuts or scratches.
- Avoid activities that produce dust.
- Wear appropriate PPE (e.g. glasses, respirators, gloves).
- Provide adequate washing facilities and ensure team members wash thoroughly before eating or drinking.

Safety Prompt 8

Bites and Stings

Associated risks

Snake or spider bites; insect stings; stings from marine creatures (e.g. box jellyfish, stonefish, fish spines); reactions to stinging plants; allergic reactions.

Risk management strategies

- Ensure that all team members are appropriately dressed (e.g. long sleeves and trousers, sturdy footwear, thick socks).
- Tuck trousers into socks and wear gloves when working in areas where there is a known or suspected higher risk of spider or insect bites.



- Provide insect repellent.
- Redeploy any team members who have known allergies to bites or stings to another task or location.
- Conduct a visual inspection of the work site to identify and flag high-risk areas (e.g. ant nests, stinging plants).
- Walk heavily in suspected snake habitat.

Safety Prompt 9

Manual Handling

Associated risks

‘Manual handling’ describes any activity requiring the use of force exerted by a person to lift, push, pull, carry or otherwise move or restrain any animate or inanimate object.

Associated risks include injuries resulting from a single event of overexertion, or as a consequence of sustained application of force (i.e. overuse). These injuries are characterised by discomfort or persistent pains in muscles, tendons and soft tissues, most commonly in the back, neck, shoulders and wrists.

Risk management strategies

- Use gentle warm-up stretches before commencing manual handling tasks and after breaks.
- Reduce the amount of manual handling by:
 - restructuring the task
 - using mechanical aids (e.g. crowbar)
 - carefully planning the workplace layout
 - having heavy materials delivered as near as possible to the work site.
- Set weight limits for lifting that take account of the skill and physical stature of the team members. Do not allow demonstrations of strength.
- Reduce the weights lifted or carried, or the force applied, when working on uneven or slippery surfaces.

- Explain and demonstrate proper individual, pair and group lifting techniques.
- Avoid, or limit the duration of, tasks that require the adoption of biomechanically unsound postures (e.g. slouching or overreaching).
- Rotate tasks, even if team members are not experiencing discomfort.
- Check that equipment to be used is appropriate for the tasks to be undertaken and is properly maintained.

Safety Prompt 10

Working in Snake Habitat

Associated risks

Bites; fear or phobias; risks arising from emergency evacuation. (See also ‘Bites and stings’, page 4–3).

Risk management strategies

- Seek local advice regarding the snake risk history of the area.
- Do not work at the site if the risk cannot be adequately managed.
- Where practicable, avoid working in known snake habitat during early spring when snakes are generally most aggressive.
- Wear boots, long trousers and thick socks. Gaiters may also be advisable in higher risk areas. Gloves must be worn when hands may be at risk of being bitten.
- Do a ‘heavy line walk’ through the area before commencing work, and after breaks.
- Do not work in a circular or ‘surrounding’ formation that might prevent a snake from escaping.
- Use lifting aids (e.g. crowbar) when lifting objects that might hide snakes (e.g. rocks, logs, rubbish).
- If a snake is seen, stay clear and point out its location to nearby workers.
- Train in, and regularly review, snakebite first aid.
- Ensure that the emergency response plan is understood by all team members.
- In the event of a bite, render first aid, then arrange medical assistance. Remember that in most instances a high-speed dash to hospital gives rise to greater risk than the snakebite.

Safety Prompt 11

Working in Crocodile Habitat

Associated risks

Attack; injury; death; fear or phobias; risks arising from emergency evacuation.

Risk management strategies

- Seek local knowledge and information from Queensland Parks and Wildlife regarding the presence of crocodiles in an area.
- Avoid the site.
- Ensure at least one team member watches the waterway at all times to check for crocodiles.
- Use a sampling pole to collect samples.
- Stand for sampling at least 2 m from the bank.
- Ensure the site has good visibility of the waterway.
- If at all unsure of the safety of the site, DO NOT GO THERE OR SAMPLE.
- Maintain a safe distance between team members and water that is deemed dangerous because of depth, current, murkiness, turbulence or difficulty of escape.
- Refrain from working on steep, slippery or unstable banks.
- Don't disturb crocodile nests, as nesting crocodiles may be aggressive.
- Travel quietly in a stable boat when sampling. Never approach a crocodile, and keep hands and legs inside the boat.
- Never provoke crocodiles, even small ones.
- Do not encourage wild crocodiles by feeding them. This is illegal and dangerous!
- Camp at least 50 m from the water's edge and never prepare food or clean fish at the water's edge.
- Stand back when fishing. Don't stand on overhanging logs.
- Never swim in crocodile territory.
- Never collect water samples in poor light or at night.



Safety Prompt 12

Accessing Rugged or Isolated

Worksites

Associated risks

Cuts, spikes and scratches to body, face and eyes; muscle strain from long or difficult walks; hay fever and asthma. (See also 'Bites and stings', page 4–3; 'Manual handling', page 4–4; 'Working in snake habitat', page 4–4; 'Working in crocodile habitat', see left).

Risk management strategies

- Ensure that boots are suitable for walking, and sufficiently sturdy for the terrain.
- Wear long trousers and thick socks. Gaiters may also be advisable in higher risk areas. Gloves must be worn when hands may be at risk of being bitten.
- Demonstrate and encourage warm-up stretches.
- Maintain a safe walking space of at least 2 m between team members.
- Check that all workers are feeling fit and well before setting out.
- Notify a reliable non-participant of the intended route and duration of the activity.
- Mangrove environments:
 - Wear long-sleeved, brightly coloured clothing to ensure visibility and to avoid scratches—old overalls are ideal.
 - Try to avoid deep mud areas—they are very tiring and difficult places in which to work. Site and tree damage can occur.
 - Some tree roots will not be strong enough to support a person's weight and may collapse—avoid climbing over prop roots.
 - Always wear sturdy footwear, especially in deep mud where shoe loss is a possibility.
 - Maintain a watch for crocodiles.
 - Permits from Queensland Department of Primary Industries and Fisheries may be required to access or disturb mangrove areas.



Safety Prompt 13

Working with Chemicals

Associated risks

Poisoning; irritation or burning to skin or eyes; loss of respiratory function; back, arm or shoulder strains. (See also 'Manual handling', page 4-4).

Chemicals may also present a risk of fire or explosion.

Risk management strategies

- Read and retain the relevant material safety data sheet (MSDS).
- Check that there are no leaks in containers, and that spray equipment is operating correctly.
- Wear appropriate PPE as advised on the MSDS. Note that the use of certain PPE may accelerate the onset of heat stress.
- Rotate tasks to avoid prolonged periods of exposure.
- Explain and demonstrate how to use, carry and store correctly.
- Maintain safe working distance to avoid splash or spray drift contamination.
- Provide adequate washing facilities as directed by the MSDS.

4-6

Safety Prompt 14

Surveying and Data Collection

Associated risks

Exposure to weather; becoming lost; hay fever and asthma; being unable to communicate in the event of an emergency. (See also 'Bites and stings', page 4-3; Working in hot or cold conditions, page 4-2; 'Working in snake habitat', page 4-4)

Risk management strategies

- Ensure that all team members know the boundaries of the survey area and remain within them at all times.
- Set times at which teams must return or report to the supervisor.
- Wear boots that are suitable for walking, and sufficiently sturdy for the terrain.

- Instruct that any team member who becomes lost should find the nearest shelter and remain there while using an agreed distress signal (e.g. three whistle blasts).
- Ensure that all team members have means of communicating an emergency signal (e.g. whistle, radios) and fully understand the signals to be used if required.
- If the survey involves collecting scats, ensure that this is done hygienically (e.g. by using gloves or tongs).
- Work in pairs as a minimum group size.

Safety Prompt 15

Working near Roadsides

Associated risks

Exhaust fumes or dust causing eye and respiratory irritation; excessive noise; collision or impact injuries; potentially dangerous litter; communication difficulties.

Risk management strategies

- Permits are required from Main Roads Department for working on road reserves.
- Eliminate or minimise the need for team members to work near roadsides.
- Place signs (e.g. SLOW DOWN, WORKERS NEAR ROADSIDE) or witches hats to indicate to drivers that there are workers ahead.
- Wear high-visibility vests.
- Maintain direct and continual supervision.
- Check that all team members understand the signals to be used, and that the signals are clear and unambiguous.
- Work upwind or out of fume and dust range.

Safety Prompt 16

Working from Bridges

Sampling from bridges is a high-risk activity that should only be undertaken under strict supervision. Permits may be required for working on road bridges and road reserves. High-flow river event monitoring, when the bank of the river or stream is not safe or accessible, is usually the only time that bridges are used for sampling.

Associated risks

Exhaust fumes or dust causing eye and respiratory irritation; excessive noise; collision or impact injuries; slips, trips or falls into water; communication difficulties; muscle strain from pulling against flood waters; being tipped over the side of the bridge because of equipment being caught by floating or submerged debris.



Risk management strategies

- DO NOT SAMPLE FROM RAIL BRIDGES.
- Follow all safety requirements of the Main Roads Department permit where available.
- Eliminate or minimise the need for team members to work from bridges.
- Arrange for the appropriate authority to place signage alerting motorists to roadside workers ahead.
- Wear high-visibility vests.
- Only use a road bridge for sampling if the bridge has a footway or footpath.
- Maintain direct and continual supervision.
- Check that all team members understand the non-verbal signals to be used, and that the signals are clear and unambiguous.
- Be aware that the noise of the river may mask the sound of approaching traffic.
- Work upwind or out of fume and dust range.
- Structure sampling to reduce the amount of time spent on the bridge.
- At least one team member should ‘spot’ for floating debris that may injure personnel or damage equipment.
- Pay particular attention to the danger from passing traffic. Look both ways each time when stepping away from the edge of the bridge or moving into the carriageway.
- The team’s vehicle must not be parked in a position where it obstructs the vision of motorists or the team.

Safety Prompt 17

Working near heavy machinery

Associated risks

Exhaust fumes; excessive noise; dust (asthma trigger); collision or impact injuries; communication difficulties.

Risk management strategies

- Eliminate or minimise the need for team members to work near heavy machinery.
- Advise operator of the location and movement patterns of those working nearby.
- Maintain direct liaison between the team, supervisor and the plant operator.
- Develop and demonstrate a set of signals to be used. These must be clear, unambiguous and understood by all.
- Work upwind or out of fume and dust range.
- Wear high-visibility vests.
- Wear appropriate PPE (e.g. glasses, respirators, ear protection).

Safety Prompt 18

Working at Heights

Associated risks

Fall-related injuries; overuse or posture-related strains; impact injuries from falling objects; anxiety and fear.

Risk management strategies

- Wear a fall-arrest device (anchored safety harness) and helmet with a chin strap. This is mandatory if the fall height exceeds 2 m.
- Check for electrical power lines before any team member climbs to an elevated work station.
- Do not allow any worker to work directly under another worker.
- Place ladders on a non-slip surface, and secure them against movement.
- Limit the number of team members working at height (e.g. one person only on a ladder).
- Secure any tools or equipment being used at height.
- Appoint at least one ‘spotter’ whose sole task is to monitor the safety of workers on elevated work stations.
- Take account of the stature, agility and willingness of team members when allocating tasks.
- Rotate tasks, even if team members are not experiencing discomfort.



Safety Prompt 19

Working with/near Animals

Associated risks

Bites; scratches; infection; unhygienic environment. (See also ‘Manual handling’, page 4–4).

Risk management strategies

- Where animal handling is a required part of the project, provide appropriate animal handling training.
- Stress that all team members must be alert for unpredictable behaviour by animals.
- Take into account the physical strength and stature of persons handling particular animals.
- Wear appropriate PPE (e.g. glasses, gloves, long sleeves).
- Make adequate provision for the maintenance of personal hygiene (e.g. clean water and soap).
- Where animal contact or handling is not a required part of the project, instruct volunteers not to feed, pick up or otherwise handle animals encountered during activities.

4–8

Safety Prompt 20

Collecting ‘Sharps’

Associated risks

Needle-stick injuries; infections including hepatitis and AIDS; cuts and gashes.

Risk management strategies

- Use tongs to pick up sharps.
- Wear gloves and sturdy footwear. Eye protection may also be necessary.
- Determine a search strategy—gain local knowledge of the area, conduct a visual inspection of the site and flag any sharps for collection, minimise the number of people involved in a search.
- Rake through known areas of disposal.
- Maintain a safe working distance to avoid the inadvertent scratching or spiking of other team members.
- Provide soap and water on site.
- Withdraw the team if necessary to allow for professional removal of sharps.
- Put all sharps in approved sharps containers for disposal. Disposal should be in accordance with local health authority or council regulations.
- When wading, always wear sturdy footwear to protect against the presence of broken glass.

5. Pocket safety guide for volunteers



The following safety guide briefly outlines volunteers' responsibilities with regard to safety. It has been designed for reproduction on A4, preferably on light card and laminated for durability and water resistance, then folded to A5 size. A copy should be issued to each volunteer at the initial briefing.



Additional information

Sun protection: Sunshine is a great attraction, but Australia has a high incidence of skin cancer resulting from over-exposure to the sun's ultraviolet rays. Loose-fitting long trousers, long-sleeved shirts, a broad-brimmed hat and sunscreen (high protection factor) are recommended whenever you are to be out of doors for extended periods.

Insects: Insect-borne diseases, while not common, can be contracted in any part of Australia. Long sleeves, long trousers, and insect repellent will usually provide adequate protection.

Dehydration: Always make sure you are carrying or have access to water whenever engaged in physical activity. Regular drink breaks and rest periods are important.

Hypothermia: Sub-zero temperatures are not uncommon across wide areas of Australia during winter, or at any time in the high country. A waterproof, windproof jacket is recommended and further advice should be sought if travelling in Australia's mountains or southern regions.

Water safety: Swimming in natural areas is popular in Australia, but local advice is essential to ensure that the river, lake or beach is safe. Most popular beaches have a flagged, safe swimming area which is patrolled by lifeguards.

Snakes: Venomous snakes are found throughout Australia and must be treated with respect. Fortunately they are very shy and usually avoid contact with humans, but the wearing of sturdy shoes and socks is recommended when walking in or near forest, grasslands or parklands. If snakes are encountered they should not be disturbed ... enjoy watching them, then move away quietly.

Road travel: Australia has strict laws relating to speed limits and alcohol consumption by drivers. Do not travel with anyone who does not comply with these laws.



Safety guide

for community-based waterway monitoring groups

Community-based waterway monitoring group safety guide

Group responsibility: The group has a responsibility to provide a safe working environment for its volunteers and staff.

Volunteer responsibility: Volunteers must cooperate with the group in the maintenance of a safe working environment, and must comply with the group safety policy.

Drugs, alcohol and smoking: Smoking and the consumption of alcohol or the use of illegal drugs are not permitted in group vehicles or offices.

Vehicles and travel: Volunteers will not be authorised to drive vehicles. During travel, volunteers must wear seatbelts and ensure they are correctly fitted. Volunteers must also avoid causing distraction to the driver, which may endanger the safety of all vehicle occupants.

Protective clothing: Volunteers must wear sturdy boots on group project sites, and additional personal protective clothing as directed by the team leader, including clothing which provides adequate protection against the sun and insect and spider bites.

Pre-existing medical conditions: It is essential that volunteers declare, confidentially, any pre-existing medical conditions which may affect their participation in group projects. In some instances, pre-existing conditions may limit participation in remote or isolated projects.

Register of injuries: If at any time a volunteer sustains a project-related injury on a project, even if minor, the injury should be treated and then recorded in the register of injuries. Volunteers should ask to do this.

Safety equipment: Volunteers must not interfere with any safety equipment such as fire extinguishers, smoke detectors etc. installed in any group office or vehicles. Any breach of this requirement may endanger the lives of others. (All projects are supplied with a first aid kit.)

Medications and personal hygiene: The group will not normally supply or administer medications. Volunteers must supply their own medications and toiletries, and maintain standards of hygiene which show appropriate respect for the health and comfort of other team members.

Tool use: Volunteers will be instructed in the safe use and carrying of a range of hand tools. Volunteers will not normally be authorised to use power tools. Care must always be taken to maintain a safe working distance between volunteers. That distance should not be less than three metres when using 'swinging' tools such as picks, mattocks or axes.

Chemicals: Chemicals may be used by volunteers only when under the supervision of an appropriately qualified person, and only then where there is full compliance with the safety directions detailed on the material safety data sheet (MSDS). Volunteers may request to examine the MSDS.

The right to feel safe: Volunteers and staff must not only be safe; they must also feel safe. Volunteers should immediately draw to the attention of their team leader any situation which causes them to feel unsafe or feel concern for the safety of others.

Emergency: In case of life-threatening emergency call 000 (on landline) or 112 (on mobile phone).



6. Team leader project briefing guide



This briefing guide acts as a checklist for team leaders when outlining safety procedures for each project undertaken.

Team Leader Project briefing Guide

It is a requirement that team leaders provide a project briefing relating to project arrangements and safety.

Routine briefing

- Explain work to be undertaken.
- Clarify duties and responsibilities for the day.
- Revise the risk assessment while walking or visually inspecting the site (refer to relevant safety prompts).
- Check that all volunteers are fit and well and that they will not be adversely affected by participating in the day's project work.
- Check that all volunteers are appropriately dressed.

Pre-project checklist

- Volunteer details including pre-existing injuries and personal management plans
- Fully stocked first aid kit
- Safety manual
- Register of injuries
- Landholder contact details
- Appropriate tools and PPE
- Spare risk assessment and accident/incident forms
- Vehicle safety check
- Safety briefing before work commences.

The following content format is to be followed for all briefings

- The aims of the project
- Who the project is being undertaken for
- Why the project is being undertaken
- How the aims of the project will be met.

Volunteer duties: Make sure everyone is clear on their duties and how they will perform the work to be undertaken. Ask individuals to explain their tasks.

Risk assessment: Go over the procedures of risk assessment and challenge the team to identify risk control strategies. Ask questions to confirm understanding.

Protective clothing: Check that all volunteers are properly dressed and equipped. Ensure they are wearing boots and personal protective clothing, including clothing which provides adequate protection against ultraviolet radiation (the sun) and insect and spider bites.

Safety equipment: Explain the use of any safety equipment to be used on the project and ensure that you highlight the consequences of misuse.

Pre-existing medical conditions: Explain the nature of the project to be undertaken and ask if any volunteer has a pre-existing medical condition or injury that would affect their participation.

Register of injuries: Remind volunteers of where they can locate the register of injuries, and what they should do if injured.

Emergency response: Outline actions to be taken should the need arise to evacuate the team, or an individual, from the project site or accommodation.

Accommodation and personal hygiene: Explain how you would like them to store food and how a campsite should be left. Ensure that all volunteers have an understanding of the expectations with regard to their personal hygiene.

Drugs, alcohol and smoking: Smoking and the consumption of alcohol or the use of illicit drugs are not permitted in group vehicles, offices, worksites or accommodation. Ensure everyone understands this policy.

Vehicles and travel: Remind volunteers that they must wear seatbelts and ensure that they are correctly fitted.



Work-day structure: Ensure that volunteers are clear on the day's structure, including working hours, morning tea, lunch, other breaks, and how frequently to rotate tasks if necessary.

Ensure all team members understand the issues that have been highlighted above, and ask at the completion of the talk whether there are any questions.

7. Volunteer briefing format and safety induction



All volunteers must be briefed using a standard format to ensure consistent and complete delivery of important information. It is important that enough time be set aside for the briefing. The following guide is for use by team leaders and management committee members to induct new volunteers.



Volunteer briefing format and safety induction

For use by team leaders and management committee members to induct new volunteers, to ensure consistent delivery of important information.

Welcome

Volunteer registration form

All volunteers must complete a volunteer registration form. Ensure all sections are completed in full.

Pre-existing medical conditions or past injuries

Volunteers must declare on the volunteer registration form any pre-existing medical conditions or past injuries which may affect their participation on projects, and their management plan for this condition or injury. Ensure you are sensitive in collecting this information, and provide privacy for further discussion if required. Explain why the group needs to know—for the volunteer's own safety, the group needs to know how to best avoid aggravating an existing medical condition or injury. In some instances, medical conditions or injuries may limit participation on projects (always check if you are unsure). Ensure that volunteers understand the nature of the group's projects.

Volunteer responsibility

Volunteers must comply with the safety policy. Emphasise that volunteers must listen carefully to safety directions given by the team leader, and must also read carefully the 'safety guide' card. **Ensure you have given the volunteer a copy of the pocket safety guide for volunteers.**

Drugs and alcohol

Illegal drugs and alcohol are not permitted on project sites.

Smoking

Smoking is not permitted while working on any project site.

Protective clothing and equipment

Check the following list of items—if a volunteer does not have adequate personal gear, assist them by telling them where they can buy required items locally.

Clothing*

Volunteers should have long-sleeved shirts, long trousers, a wide-brimmed hat and gloves. Remember that you are checking to ensure that volunteers have adequate sun protection as well as protection from insect and spider bites. Depending on location and season, also check that volunteers have adequate warm clothing and wet weather gear if necessary.

Boots*

Volunteers should have boots which protect their feet and ankles.

**The team leader has the authority where the risk assessment indicates an unacceptable level of risk to exclude a volunteer from an activity if they do not have appropriate PPE.*

Other personal gear

Check that all volunteers have work gloves and a drink bottle. Volunteers should also have sunscreen, sunglasses and insect repellent.

Personal hygiene

Volunteers must supply their own personal hygiene needs.

Medications

The team leader will not normally supply or administer medication.

Safety equipment

Remind volunteers that they must not interfere with any safety equipment such as smoke detectors or fire extinguishers.

Project briefings

Ensure volunteers understand they will be given a safety briefing at the start of each project, and a daily briefing on specific project activities, including safety.

Vehicles, power tools, chemical use

Volunteers should be aware of the safety requirements and policy regarding their use of any vehicles, power tools or chemicals while they are engaged in a group project.

The right to feel safe

Volunteers must not only be safe, they must feel safe. Volunteers should alert their team leader if there is any situation in which they feel unsafe or feel concerned for the safety of others.

Contact phone numbers

Advise volunteers of emergency and after-hours contact phone numbers for the team leader or other nominated group member.

Recycling policy

Advise volunteers about the recycling policy.

FINALLY

Remind volunteers that the group reserves the right to alter projects or teams on short notice according to unforeseen circumstances, but will give volunteers as much notice of changes to the program as possible.

The group expects that volunteers will always act responsibly for their own safety, and for the safety of others.

THE VOLUNTEER REGISTRATION FORM SHOULD NOW BE COMPLETE. ASK THE VOLUNTEER TO SIGN AND DATE IT.

Thank volunteers for choosing to volunteer their time and efforts, and wish them a pleasant experience.

8. Sample forms for completion



Each form serves as a valuable record for the group and should be completed correctly to ensure accuracy and accountability.

- 8.1 Volunteer registration form
- 8.2 Project risk assessment form
- 8.3 Sign on/off form
- 8.4 Accident/incident investigation report
- 8.5 Register of injuries
- 8.6 Record of paracetamol use



Volunteer registration form

Mr, Miss, Ms, Mrs: _____ First name: _____ Last name: _____

Street address: _____

Town/suburb: _____

Postcode: _____ Country _____

Telephone (home) _____ Telephone (work): _____

Mobile: _____ E-mail: _____

Date of birth: ____ / ____ / ____ (Day/Month/Year)

Emergency contact person: _____ Relationship: _____
(e.g. parent, partner)

Telephone (home): _____ Telephone (work): _____

Mobile: _____ E-mail: _____

Do you have any medical conditions, allergies, disabilities or past injuries **that may affect your participation?**

Yes No

If yes — Please discuss with team leader and complete the questions over the page.

Do you give approval for any photographs or videos that may be taken of you while participating in group activities to be used by the management committee for promotional purposes?

Yes No

Conditions of participation:

I agree to comply with the following terms that refer to my participation in all projects and activities:

- I have notified the team leader of any relevant medical conditions and pre-existing injuries, and I consent to the team leader rendering or authorising such medical treatment as necessary and accept responsibility for all associated expenses.
- I am a volunteer and not an employee of the management committee.
- I will not smoke, consume or store alcohol or illicit drugs while working on a project site.
- I shall respect the rights, feelings and property of all others associated with projects.
- I shall cooperate with the team leader to ensure a safe, happy and hygienic team environment.
- My placement on all projects is at the discretion of the team leader.

I understand that failure to comply with any of these conditions may result in the team leader requesting me to leave.

Signature _____ Date: ____/____/____

Office use only — to be initialled and dated by the team leader who undertakes each step below.

Team leader to initial and date

All declared pre-existing medical conditions discussed with volunteer _____

Safety briefing provided _____

All information checked and complete _____

Volunteer registration form (continued)

If any pre-existing medical conditions, allergies or past injuries are declared, the following questions need to be discussed with the team leader or management committee representative.

More information on the condition:

E.g. *How serious is the condition? What are the symptoms? What aggravates the condition? How often do episodes occur? When was the most recent episode?*

Based on responses to Question 1, how might the declared condition affect participation?

E.g. *What other relevant activities does the volunteer undertake on regular basis?*

What is the management plan to minimise the likelihood of aggravating the declared condition?

E.g. *Medication to be taken on the project, avoid allergy triggers, rotate activities, carer to accompany volunteer.* If unsure please consult the management committee executive.

A doctor's certificate may be necessary.

What is the emergency management plan?

E.g. *Seek medical attention or administer medication. How quickly do these need to be undertaken?*

Volunteer

Signature _____ Name: _____ Date: ____/____/____

Management committee representative

Signature _____ Name: _____ Date: ____/____/____

Project risk assessment form

Group: _____

Project location: _____

Project date: _____

Team Leader: _____

Pre-existing medical conditions checked? Yes No

Volunteer induction provided? Yes No

Simple risk assessment process:

- Consider the site
- Consider the tasks to be undertaken
- Consider the people
- How could a person be injured?
- Identify risk control strategies
- Supervise and monitor to make sure everyone is sticking to the 'rules'
- Emergency response plan

Hazardous characteristics of site

Tasks to be undertaken

Risks to third parties / general public

Risk identified: *Serious road accident*

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain

Likely consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

- *Pre-departure vehicle check*
- *Compliance with group speed limits*
- *Wear seatbelts at all times when vehicle is in motion*
- *Ensure all limbs are inside the vehicle*
- *Reduce distractions to driver*
- *Driver to take regular rest breaks on long trips*

Date: _____

Project risk assessment form (continued)

Risk identified: *Manual handling — application of force or resistance (e.g. lifting, carrying, pushing, pulling, holding)*

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain
Likely consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

- *Use 'smart' solutions that reduce need for manual handling*
- *Gentle warm-up stretches*
- *Ensure clear path when carrying*
- *Rotate tasks, take regular breaks*
- *Use correct techniques*

Date: _____

Risk identified: *Manual handling — repetitive actions (e.g. using swinging tools, raking, using secateurs)*

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain
Likely Consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

- *Regular gentle stretches*
- *Rotate tasks, take regular breaks*
- *Use correct techniques*

Date: _____

Risk identified: *Manual handling — postural compromise (e.g. bending, reaching, twisting, sustained awkward postures)*

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain
Likely Consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

- *Short work periods*
- *Alternate with complementary tasks*
- *Regular gentle stretching*
- *Eliminate tasks combining bending / twisting with loads*

Date: _____

Risk identified:

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain
Likely Consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

Date: _____

Risk identified:

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain
Likely Consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

Date: _____

Project risk assessment form (continued)

Risk Identified:

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain
Likely Consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

Date: _____

Risk Identified:

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain
Likely Consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

Date: _____

Risk Identified:

Likelihood: 1. Highly unlikely / rare 2. Unlikely 3. Quite possible 4. Likely 5. Almost certain
Likely Consequence: 1. Insignificant 2. Minor 3. Moderate 4. Major 5. Catastrophic

Date: _____

Project location reference points for emergency services: (e.g. 200 m west from the intersection of Smith Road and Jones Lane)

Date / dates at this location: ___/___/___ to ___/___/___

Emergency contacts: '000' OR '112' for mobile phones

Local Police _____ Fire _____ Ambulance _____

Team leader: (please print) _____

Signature: _____ **Date:** ___/___/___

Accident/incident investigation report (see explanatory notes, page 3)

Type of incident:

Medical treatment case

Lost workday case

Near miss

Vehicle / equipment damage

Other significant event

Work site details:

Project location: _____

Team leader: _____

Incident details:

Incident / injury: _____ Day: _____ Date: _____ Time: _____

Affected person: _____ Male Female

Type of injury: _____

Body part injured: _____

Location of accident / incident: _____

Witness / es: _____

Task undertaken by injured party: _____

What safety instructions and / or training were given prior to project?

What type of personal protective equipment was injured party wearing at time of incident?

Describe the incident / accident or the significant event, identifying the cause:

What action(s) has been taken at the work site level to prevent a recurrence?

Accident/incident investigation report

Date action(s) implemented: _____

Did the injury relate to a pre-existing injury or medical condition? Yes No

If yes, was this condition disclosed to the group? Yes No

Was an appropriate entry made in the register of injuries? Yes No

Further action requested by team leader: _____

Injured person (please print): _____

Signed: _____ Date: _____

Management committee member (please print): _____

Signed: _____ Date: _____

Equipment damage:

Vehicle / equipment damage: _____

Vehicle type: _____ Registration number: _____

Name of driver: _____

A motor vehicle claim form attached: _____ Yes No

Other equipment damaged: _____

To be completed by team leader:

Was the activity that led to injury listed as part of approved project application?
Yes No

Was the activity addressed on the risk assessment? Yes No

Was a personal management plan developed and documented for relevant pre-existing injury or medical condition? Yes No

What additional PPE could have prevented or minimised the injury?

What additional risk management strategies could have been employed?

Further action taken to minimise likelihood of recurrence:

Accident/incident investigation report

Team leader (please print): _____

Signed: _____ Date _____

Committee member (please print): _____

Signed: _____ Date _____

Comments: _____

Explanatory notes:

- An incident to be investigated is any unplanned event or chain of events which has, or could have, caused one or more of the following :
 - injury or illness requiring medical treatment
 - injury or illness causing lost workday / s
 - damage (loss) to assets, the environment or third party / ies
 - stress or embarrassment to individuals or to the group.
- A lost workday case is any work injury (i.e. the injury or illness occurred while the injured person was under team leader supervision) which renders the injured person unable to perform their regular or restricted work (alternate duties) on the next workday after the day on which the injury was sustained.
- A medical treatment case is any work injury which requires treatment by a doctor or professional medical staff e.g. nurse, ambulance officer, paramedic.
- A 'near miss' is an incident which may have resulted in serious injury, illness, loss and / or damage. Near misses must be investigated to guard against a recurrence.
- First aid cases are those where first aid rendered on site is the only treatment necessary. These must be recorded in the register of injuries. Lodgement of an accident / incident report will only be necessary if the first aid case arose from a near miss that had the potential to cause serious injury.
- Vehicle / equipment damage must be reported to ensure that appropriate insurance processes are observed, and repair is promptly arranged. A motor vehicle insurance claim form must also be attached to this report when forwarded to the regional / parent body.
- Other 'significant events' may include volunteer, staff or partner agency management of issues.

