

Adventure Activity Standards: Four Wheel Driving

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Introduction to AAS

The South Australian Adventure Activity Standards (AAS) have been developed to assist organisations, guides and leaders to plan and undertake outdoor adventure activities with dependent participants. This document should be used as part of your organisation's risk management program.

Participants undertaking adventure activities may already have a degree of skill and experience in a particular adventure activity, and as such may be less dependent upon the group leader for guidance and instruction. In these situations, the AAS should be adapted to reflect the experience of group members and the particular situation of the adventure activity.

Regardless of the extent to which the AAS is adopted, each organisation, guide and leader has a duty of care to its participants to have completed a risk analysis of the activity, and developed a risk management approach to address potential and unexpected situations.

The AAS have been prepared with the involvement of a wide cross-section of South Australia's and Victoria's outdoor industry, and reflects minimal acceptable standards of behavior expected when planning and undertaking outdoor adventure activities with inexperienced and dependent participants.

Acknowledgement

In the development and implementation of AAS in South Australia, Recreation SA acknowledges the work of the Outdoor Recreation Centre Inc. in initiating, coordinating and developing AAS through many outdoor recreation groups within Victoria.

These AAS can now be adapted nationally across a number of outdoor adventure activities, and Recreation SA has reviewed and amended the content, in consultation with South Australian outdoor industry representatives, to reflect South Australia's legal, government, environmental, social, education and industry conditions.

The implementation of the AAS in South Australia is recognition of the State's commitment to national minimum industry standards for outdoor adventure activities.

Important disclaimer

The information contained in this publication has been gathered through widespread industry consultation. All reasonable attempts have been made to ensure that it is accurate, relevant and current at the date of publication. Nevertheless, the Adventure Activity Standards (AAS) are only advisory and general in nature and should not be relied upon to meet individual or specific requirements. They are recommendations for voluntary application to adventure activity providers and participants. They are not binding on any person or organisation and have no legal force.

The AAS will not cover each and every circumstance of an adventure activity. Nor can they, when adhered to, entirely eliminate the risk or possibility of loss or injury. Consequently they should be used as a guide only. Whenever using the information contained in this publication or any AAS, all adventure activity providers should carefully evaluate the specific requirements of the intended adventure activity and the persons participating in it. If necessary, advice should be obtained from a suitably experienced and qualified professional person.

This publication and the information and the AAS it contains are made available on the express condition that the Government of South Australia (Office for Recreation and Sport) and Recreation SA, together with the authors, consultants and advisors who have assisted in compiling and drafting this publication and the AAS are not rendering professional advice to any person or organisation and make no warranties with respect thereto and to the maximum extent permitted by law disclaim all liability and responsibility for any direct or indirect loss, damage or liability which may be suffered or incurred by any person as a consequence of reliance upon anything contained in or omitted from this publication.

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- Operation Flinders
- Bushwalking Leadership SA
- Wilderness Escape Outdoor Adventures
- Venture Corporate Recharge
- BCS Adventure Services
- Scouts SA
- The Association for Horsemanship Safety and Education
- Rock Solid Adventure
- With Good Company
- TAFE SA, Adelaide North

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- Department of Education and Children's Services
- Department for Environment and Heritage
- Department for Families and Communities—Office for Youth
- Department for Families and Communities—Youth Adventure and Recreation Service
- Office for Recreation and Sport
- Recreation SA
- TAFE SA, Adelaide North
- Wilderness Escape Outdoor Adventures
- Venture Corporate Recharge
- South Australian Rock Climbing Education Association (SAREA)

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- South Australian Association of 4WD Clubs Inc. (To be confirmed)
- Department for Families and Communities—Youth Adventure and Recreation Service

Adventure Activity Standards: why have standards?

AAS are voluntary guidelines for undertaking adventure activities in a manner designed to promote:

1. **Safety** for both participants and providers
2. **Information** for providers against legal liability claims and criminal penalties
3. **Assistance** in obtaining insurance cover.

These AAS are **not** statutory standards imposed by law.

Basis of legal liability

Legal liability for personal injuries or property damage is primarily governed by the law of:

1. Contract
2. Negligence.

Although provisions of statutes such as the *Trade Practices Act 1974 (Cth)* and the *Recreational Services (Limitation of Liability) Act 2002* are also relevant.

Claims in contract

For there to be a claim in contract there must be a legally enforceable agreement (i.e. a contract) between the person who has suffered injury or loss and the provider against whom the claim is being made. For example, there is a contract between a provider and a client, where the provider agrees to provide services for payment. The contract can be in writing or oral, or both. The claim in contract can only be made by one party to the contract against the other party, unlike a claim in negligence, which is not so limited.

Apart from the express terms of the contract, the law will usually imply certain terms into a contract that require a service provider to do a number of things when providing that service. Those implied terms might include a requirement to provide competent guides and instruction, safe equipment, and a general requirement to exercise the degree of reasonable skill and care which is to be expected of a competent provider. Some of these terms will be implied by sections of the *Trade Practices Act 1974 (Cth)* and the *Recreational Services (Limitation of Liability) Act 2002*.

If injury or damage occurs because the provider did not exercise reasonable care in the provision of the service, a Court can find there was a breach of the contract entitling a party to claim compensation (damages) for the loss or injury suffered.

Claims in negligence

Over recent years the law of negligence has undergone substantial legislative change in South Australia. These changes are set out in the *Civil Liability Act 1936 (SA)*.

The essential elements of a claim in negligence are:

1. a duty of care being owed by the provider to take reasonable measures for the safety of their clients/participants

2. a breach of this duty of care
3. the breach of the duty of care being a cause of the harm suffered by the participant.

A successful claim in negligence against a provider will result in an award of damages against that provider to compensate for the loss or injury thereby suffered.

Although the law does not automatically impose a duty of care, it is likely such a duty will be imposed when one party (the provider) assumes responsibility for another in the provision of adventure activities.

The duty of care is a legal requirement imposed by the courts on a provider to take reasonable care to protect a client or participant from foreseeable harm or loss.

If a claim is made and a court finds that a duty of care is owed, the court must then decide what is the appropriate level or standard of that duty of care, to determine if the provider has acted reasonably or alternatively has breached the duty of care. The standard of care is determined by all the relevant circumstances and the particular facts of each case. A court will have regard to the experience of the providers and the clients, the conditions at the time, and ultimately may seek the guidance from experts in the field. A court will find that the standard of care has not been met, (i.e. there has been a breach of the duty of care) if the evidence, on the balance of probabilities, establishes that the provider has not acted reasonably in the circumstances. If that conduct has caused loss and damage the provider will be liable to pay damages to compensate the party who has been injured or has suffered a loss.

For example, in an outdoor recreation activity some participants could find themselves in a situation suited to more advanced participants. There may be persons in the group who have been lead to believe by the provider that a certain skill level was not required and enrolled to join a group mis-described as being for 'beginners'.

If an accident occurred due to their inexperience, and these 'novice' participants were injured, it is possible that a legal action to recover damages might be based as follows:

- in the law of contract, against the provider, if it can be demonstrated that the provider incorrectly described the group as being for 'beginners'
- in the law of negligence, against the leader and guide, as well as the provider because of a failure to adequately instruct, advise and perhaps supervise the group.

The duty of care of the provider is higher than that placed on the ordinary citizen because the provider has agreed to provide services for a reward or assumed a responsibility of care for others, e.g. by holding him/herself out as experts or specialists who have agreed to take participants into potentially dangerous or remote situations.

Whilst not an exclusive list the following is a guide to the standards that should be addressed by any provider, guide, instructor, teacher or staff member:

- ensure the activity is appropriate for the skills and experience of the intended participants
- ensure the intended activity is appropriate given the known, expected and forecast conditions

- provide adequate staff/leader supervision
- provide competent and appropriately trained staff/leaders
- provide safe and properly functioning and adjusted equipment
- provide reasonable food and safe shelter (if relevant to the activity)
- provide reasonable guidance, instruction and direction to participants
- depending on the activity, have an adequate knowledge of the area in which it is to take place and be able to provide reasonable first aid, emergency backup and rescue.

The law will require the provider to protect participants from known hazards, but also from those risks that could arise (that is, those that the provider, instructor, teacher or staff member guide should reasonably have foreseen) against which reasonable preventative measures could be taken.

In these circumstances, in order to limit potential for legal liability and to minimise the risk of injury, each organisation needs to implement risk and safety management processes, which have identified foreseeable risks and put in place measures to control such hazards. For the same reasons, all providers, leaders or guides ought, as a minimum, to have completed appropriate first aid and activity specific training.

This is particularly so where the activity is a specialised one. In these circumstances, as a participant will be seen as relying on the expertise of the provider, leader or guide, a high duty of care will be imposed because they will be considered as having a responsibility for the control, guidance and protection of the participant.

Defences against claims by participants

No Negligence

The most obvious defence to a claim in negligence is for the operator to establish that he/she acted with all reasonable care in the circumstances: that is, was not negligent.

In attempting to do so the following questions must be considered:

- was the risk of harm foreseeable?
- was the risk not insignificant?
- would a reasonable operator have taken additional precautions that would have prevented the harm?

In determining whether a reasonable operator would have taken additional precautions a court will consider the following (amongst other relevant things):

- the probability that harm would occur if care were not taken
- the likely seriousness of the harm
- the burden of taking precautions to avoid the risk of harm
- the social utility of the activity that creates the risk of harm.

Voluntary Assumption of Risk

If it can be proved, on the balance of probabilities, that a participant was fully aware of and freely accepted the risk of suffering injury in an activity then this will be a defence to a claim in negligence. It will not be a defence, however, if the injury was caused by the inexperience or incompetence of the provider, defective equipment, inadequate supervision or instruction as it is highly unlikely that any participant would have consented to accept such risks.

If the risk of harm was an obvious one then there is a rebuttable presumption that the person who suffered the harm was aware of the risk.

Duty to Warn

A person who owes a duty of care to another person to give a warning, or other information in respect of a risk, satisfies that duty if reasonable care is taken to give that warning, or other information. This is potentially very important in the context of an Adventure Activity where it may be prudent for the provider to give all participants printed instructions and warnings (where appropriate) and obtain signed acknowledgements.

However, section 38 of the *Civil Liability Act 1936 (SA)* prescribes that there is no duty to warn of an 'obvious risk', or if there is an applicable code of practice in force under the *Recreational Services (Limitation of Liability) Act 2002*. Further to this, the section does not apply if the plaintiff has requested advice or information about the risk from the defendant or if the defendant is required to warn the plaintiff of the risk either by law or pursuant to the code in force under the *Recreational Services (Limitation of Liability) Act 2002*.

Contributory Negligence

If the accident was caused or contributed to by lack of reasonable care on the part of the participant then this will be a partial defence, according to the apportionment of responsibility made by the court between the provider and the participant. In cases of extreme acts of negligence by the participant, contributory negligence can be very high (e.g. 80–90%) and sometimes a complete defence.

Inherent Risks

A person is not liable in negligence for harm suffered by another person as a result of an inherent risk. An inherent risk is a risk of something occurring that cannot be avoided by the exercise of reasonable care.

Waiver to Sue/Exclusion of Liability Agreements

Amendments to the *Recreational Services (Limitation of Liability) Act 2002*, and the *Trade Practices Act 1974 (Cth)* enables providers of 'recreational services' to modify or exclude a duty of care owed to a consumer by the use of a waiver or limitation of liability. This will only apply where there is no registered code in relation to the recreational service. The amendment will only apply until 1 August 2007, after which time the only manner in which liability will be able to be modified with respect to a recreational service will be in accordance with a registered code.

Good Samaritans, Volunteers, Apologies

Good Samaritans

Under the *Civil Liability Act 1936 (SA)* (as amended) an individual who provides assistance, advice or care to another person in an emergency, where there is no expectation of payment by money or other means, will not be able to be sued for any injury or harm he/she causes if acting in good faith without recklessness (provided the good Samaritan's ability was not significantly impaired by alcohol or drugs).

Volunteers

Pursuant to the *Volunteers Protection Act 2001 (SA)* volunteers are protected from liability for injury to another when they are acting in good faith and without recklessness in the course of carrying out community work for a community organisation. This immunity does not operate if the volunteer's ability to carry out the work properly was impaired by drugs or the volunteer was acting outside the scope of activities authorised by the community organisation or contrary to instructions given by the community organisation.

Expressions of Regret

The *Civil Liability Act 1936 (SA)* provides that no admission of liability or fault is to be inferred from the fact that a person expressed regret in respect of the incident relating to the injury.

Limitation on claims for personal injury damages

Pursuant to the *Civil Liability Act 1936* (as amended) an injured person cannot obtain damages for pain and suffering unless the injured person's ability to lead a normal life was significantly impaired by the injury for a period of at least seven days or medical expenses of at least the prescribed minimum have been reasonably incurred in connection with the injury. The assessment of pain and suffering is assigned a scale value on a scale running from zero to sixty, sixty being the most severe form of injury.

The Act also imposes a cap on damages for pain and suffering of a maximum of \$241,500 (indexed annually) together with other limitations in respect of damages for mental harm, and claims for both past and future economic loss.

Applying the Adventure Activity Standards

Having suitable risk management programs and strategies in place, and ensuring the AAS are met, will minimise the likelihood of injury or loss. Evidence of compliance with such programs and the AAS may also assist in the legal defence of claims and in helping to establish that a provider and its leaders have acted reasonably in the circumstances (i.e. were not negligent). It is also likely such programs will assist providers in obtaining more favourable insurance arrangements.

Disclaimer

The above comments on legal liability in Contract and Negligence and defences and limitations thereto, including recent legislative changes, do not purport to be a complete and accurate description of the law on these topics. The State Government of South Australia (Office for Recreation and Sport) and Recreation SA, its servants and agents are not by these comments providing legal advice to any person, company or organisation and make no warranties with respect thereto and to the maximum extent permitted by law disclaim all liability and responsibility for any direct or indirect loss, damage or liability which may be suffered or incurred by any person, company or organisation as a consequence of or in reliance upon anything contained in, implied by, or admitted in this document.

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Activity description

There are many and varied activities that are encompassed in four wheel driving (4WD). This document sets out a series of guidelines that are recommended for commercial and non-commercial activities that involve leading a group of people on a 4WD tour or activity. These guidelines bring together the interests of the participants; to protect the interest of the parties involved and to provide guidelines that will enable organisations, leaders and participants to benefit from the knowledge of the many people who enjoy the 4WD activity.

It is acknowledged that there are differing duties of care that apply to both commercial and non-commercial activities. For the purpose of AAS, 4WD is best described as vehicle touring and vehicle based camping using a 4WD vehicle. Whilst AAS apply primarily to this activity when conducted over difficult, remote or unsealed roads/tracks, it is applicable to all group trips involving dependant participants, commercial or not.

Definition of terms used

Organisation: A group of persons organised for a particular purpose and assuming the role of providing a 4WD activity (Activity Provider) being commercial (for profit) non-commercial (not for profit/community) or recreational group.

Participant: A person who joins with the trip leader to participate in and be part of the trip.

Support personnel: A person or persons who is allocated an activity within a group of participants on a 4WD activity with the intention to assist in offering the experience of the activity and satisfying the objectives of the trip (commercial or not)

Trip leader: A competent person who co-ordinates the entire group, including the support personnel, to satisfy the objectives of the trip (commercial or not)

Urban: Urban trips are defined in AAS as any trip which is at no point any more than 2 hours from emergency medical attention.

Remote: Remote trips are defined in AAS as any trip which is at any point more than 2 hours from emergency medical attention.

Emergency medical attention: Definitive medical attention being that of a medically qualified person (paramedic, doctor). This may be getting definitive medical attention to the injured participant/s or by getting the injured participant/s to definitive medical attention.

Summary of abbreviations

AAS	Adventure Activity Standards
DEST	Department of Education, Science and Training
NTIS	National Training Information Service
ITAB	Industry Training Advisory Board
SRTA	Sport and Recreation Training Australia
NOLRS	National Outdoor Leaders Registration Scheme

CBD	Central business district
Cth	Commonwealth
4WD	Four wheel drive/ing

1 Planning

Before setting out, the planning section of the activity standards contains the documented administrative aspects of AAS. It is here you will find the requirements that should be completed before undertaking any activity plan.

1.1 Activity plan for four wheel driving

Route selection is the most important consideration when creating an activity plan. Organisations and leaders should select track sections that meet the objectives of the trip. To do this, consideration should be given to the following:

- Objectives of the trip (desired outcomes)
- Group size (see 2.6)
- Group skill/experience level
- Track characteristics (technical difficulty and surrounding environment)
- Access and remoteness of area
- Weather conditions and environmental impacts
- Characteristics of the area (alpine, desert, snow)
- Duration of trip
- Suitability/availability of vehicles
- Foreseeable equipment requirements

The leader and support personnel on a 4WD trip/tour should:

- Have the required skill and experience to conduct the trip satisfy the planned objectives and effectively manage incidents
- Have knowledge of the specific areas being visited
- Have 4WD and recovery skills that are commensurate to the trip characteristics
- Have the ability to instruct and assist participants and cope with an incident/emergency.

For the benefit of advising participants track classification is recommended as follows:

Green All Wheel Drive, High Range, Road tyres

Blue Mainly High Range but Low Range required, Road tyres.

Black Significant Low Range. Standard 4WD Ground Clearance. All Terrain Tyres. Should have 4WD Driver training

Red Low Range. High Ground Clearance. Mud Terrain Tyres. Winch/Recovery Equipment. Experienced Driver

A responsible non-participating person should be informed of the trip plan details, the agreed departure, return times and participant list to be made available to rescue services in the event of an emergency.

1.2 Pre trip documentation

Documentation is often seen as a chore and not a minimum requirement. There are however, certain details which a leader and/or organisation should be aware of to maximise safety:

- Emergency strategy (including details set out below in 1.4 Emergency strategy)
- Participant's name, address and emergency contact details
- Medical information. Note that leaders should advise participants to have sufficient medication, if required, considering any foreseeable incidents or delays and to inform the leader of any special medical requirements.

Commercial participants and non-club members:

- Should provide signatures to acknowledge inherent risks following a clear introductory briefing
- Under the age of 18 should have the signature of or be accompanied by a parent/guardian.

1.3 Researching site-specific hazards

Trip leaders should consider foreseeable hazards and the potential impacts of these hazards and how they should be reasonably dealt with in planning the trip.

It is recommend that this information be documented, and if so, made readily available within the organisation. Post trip reports on track conditions and hazards encountered may be passed on to appropriate bodies.

Useful contacts for track and weather conditions are:

- The Bureau of Meteorology website: www.bom.gov.au/weather/sa/
- South Australian Association of 4WD Clubs Inc: www.saafwdc.asn.au
- The Department for Environment and Heritage—National Parks: www.parks.sa.gov.au/parks/
- The Department for Transport, Energy and Infrastructure: www.transport.sa.gov.au
- Contacting the local pub, post office or store in the area you are visiting.

1.4 Emergency strategy

Every emergency strategy should be written to manage incidents and minimise their escalation.

Trip leaders, an appropriate external contact and participants should be made aware of those details relevant to them.

A copy of the documented emergency strategy should be carried on the trip and a copy should be kept with the relevant external contact.

The emergency strategy for a 4WD trip should be specific to each area and contain:

- Access and egress routes (tracks, trails with approximate distances)
- Refuge points and helipads where appropriate
- Contact details for key organisations (e.g. land manager, emergency services) and how they are best contacted. (These may be available from the parks being visited)
- Planned start and finish time of the trip
- Details of how communication with emergency services can be obtained, if and when necessary. It is important to be aware of areas where normal communication equipment (mobile phones) will not operate, so the need for specialist equipment (satellite phone, HF radio) should be considered
- Agreed time/s to communicate with the designated external contact
- Strategy if the external contact does not receive agreed communication.

1.5 Restrictions to participation

Operational restrictions to a 4WD trip include weather, equipment, track conditions, vehicle condition, and restrictions dictated by land managers and environmental factors (flood, drought, fire).

Individual participation may be restricted if:

- Participants deemed to be under the influence of alcohol or drugs, including prescription drugs which may affect performance
- Participants who are unable or unwilling to follow instructions
- Participants with unroadworthy vehicles
- Participants with unsuitable vehicles for the planned tracks
- Participants with ill-prepared vehicles for the planned trip (tyres, load, equipment).

2 Responsibility of the trip leader/support personnel

This section includes all aspects of the activity plan that involve both the trip leader and the support personnel. This section covers the specific skills recommended for the basic requirements of leading, supporting and driving.

2.1.1 Competencies for commercial trip leader/support personnel

In the absence of a single established and recognised national training qualification for all 4WD activity providers, trip leaders should be confident of having satisfied a process of skill acquisition which should be at least equivalent to that described by the following selected units from the Department of Education, Science and Training (DEST).

A statement of attainment for these units is not compulsory. However, the inclusion of this section is intended to provide a suitable benchmark describing the skills that a leader should have as described within the National Outdoor Recreation Industry Training Package.

The driver skills indicated below are generally included in (or equivalent to) most available accredited four wheel drive training courses.

Generic

These units relate to generic competency (soft skills) expected of any individual in a position of Leadership or Management in the outdoors.

Leadership and Management Skills

Code	Unit name
SRXEMR001A	Respond to emergency situations
SRXFAD001A	Provide first aid
SRXGRO001A	Facilitate a group
SRXGRO002A	Deal with conflict
SRXRIK001A	Undertake risk analysis of activities
SRXINU002A	Apply sport and recreation law
SRXOHS001B	Follow defined OHS policy and procedures

Outdoor Recreation Skills

Code	Unit name
PUAOPE002A	Operate communication systems and equipment
SROODR002A	Plan outdoor recreation activities
SROODR005A	Guide outdoor recreation sessions
SRONAV001B	Navigate in tracked or easy untracked areas
SROOPS002B	Plan for minimal environmental impact
SROOPS004B	Interpret weather conditions in the field
SROOPS006B	Use and maintain a temporary or overnight site

Four wheel drive leader

The following areas of competence relate specifically to the expected competency of a guide on a 4WD trip.

As a pre-requisite for any 4WD in Victoria, any driver should possess a current driver's licence appropriate to the vehicle being driven.

Code	Unit name
SRODRV001B	Drive and recover a four wheel drive vehicle
SRODRV004A	Guide 4WD tours
SRODRV002B	Drive a 4WD vehicle in difficult terrain using advanced technique
SRODRV003B	Co-ordinate recovery of a 4WD vehicle using advanced techniques
TDT B4 97	Vehicle Inspection

Details of these units can be accessed by logging on to the Department of Education, Science and Training (DEST), National Training Information Service website at www.ntis.gov.au.

The above units are components of national training courses that encompass the specification of knowledge areas and skills relevant to the outdoor recreation industry and the application of that knowledge and skill to a standard of performance required in the workplace.

2.1.2 Competencies for non-commercial trip leader/support personnel

The trip leader and/or support personnel should have the following capabilities at a level appropriate for the trip being undertaken:

- First aid skills
- Capacity to respond to emergencies
- Interpersonal skills (dealing with conflict)
- Navigational skills
- 4WD techniques
- Vehicle recovery skills
- Risk assessment
- Operation of communication equipment.

2.2 First aid

Decisions on the level of first aid should be based upon the risk assessment and emergency strategy for this adventure activity. Leaders and guides should have the appropriate first aid skills commensurate with the planned activity, the skills of the group and the location of the activity, including remote areas.

A basic first aid kit should be carried on and be accessible throughout any formal recreational fishing trip involving dependant participants.

The following list provides an overview of equivalent first aid training with South Australian providers St John Ambulance and Australia Red Cross.

Level 1: Basic First Aid (Resuscitation) involves basic skills and knowledge in order to recognise and provide immediate first aid for a range of common illnesses and injuries and minimise the severity of injury or sudden illness.

Leaders and guides with Basic First Aid should be able to:

- perform CPR (resuscitation)
- manage breathing emergencies: expired air resuscitation (EAR)
- control bleeding, wounds and bandaging

Level 2: Intermediate or Senior First Aid involves skills and knowledge to recognise and provide immediate first aid for a range of common illnesses and injuries and minimise the severity of injury or sudden illness.

Leaders and guides with Intermediate or Senior First Aid should be able to:

- perform CPR (resuscitation)
- manage breathing emergencies – expired air resuscitation (EAR)
- control bleeding, wounds and bandaging
- manage extremes of heat and cold
- manage injuries to bones, joints and muscles

- manage poisoning, bites and stings
- define the principles of first aid
- demonstrate knowledge of basic human anatomy
- recognise and manage both a conscious and an unconscious casualty
- perform effective CPR and expired air resuscitation (EAR)
- identify a range of common illnesses and injuries
- control bleeding and care for various types of wounds
- recognise and manage injuries to bone or soft tissue
- recognise and manage medical conditions that may need emergency care, including heart attack, stroke, asthma, diabetes and epilepsy
- use practical first aid skills using prepared and improvised materials
- demonstrate knowledge of first aid management for a range of common illnesses and injuries.

A comprehensive first aid kit appropriate to the level of first aid training must be easily accessible at all times. Remote areas may require more advanced first aid skills such as Wilderness First Aid where leader and guides recognise, prevent and treat many illnesses and injuries prevalent in wilderness and remote locations.

2.3 Specific responsibilities of the trip leader

The following are the responsibilities of a trip leader. Individual tasks may be delegated but the responsibility remains with the trip leader.

It is the trip leader's responsibility to accurately communicate to the participants the difficulty and complexity of the trip to allow the participant to evaluate his/her level of knowledge, ability, skill and equipment to participate in the trip (or not).

The trip leader should:

- Complete trip plan
- Collect waiver forms signed by participants prior to trip where appropriate
- Research and plan for likely hazards/incidents/emergencies
- Ensure that minimal environmental impact message is conveyed and adhered to
- Assess driving experience/capabilities within group are appropriate for the planned conditions and the trip to be undertaken
- Ensure a full brief is clearly carried out and understood by all support personnel and participants (See 2.5 Communication and authority)
- Check weather reports prior to trip and if possible, every day on a multi day trip
- Check that all vehicles and equipment are prepared and loaded in an appropriate manner for the trip
- Confirm head count before, during and immediately following the trip

- Maintain awareness of the physical and psychological condition of the group and respond appropriately
- Control the pace of the group and rest group if necessary
- Ensure, to the best of your ability, that all participants avoid situations beyond their known capabilities
- Appropriately designate responsibility to support personnel
- Appoint external contact to notify SES, Police, etc. if not contacted by designated times
- Notify external contact of safe return/completion
- Check first aid kit and communication equipment prior to trip
- Ensure that the objectives of the trip are satisfied with appropriate consideration for safety
- Ensure that any incidents are documented and reported to the appropriate authorities
- Complete the incident report and file with organisation

2.4 Support personnel

All persons acting as support personnel should support and assist the trip leader according to the trip plan and manage any incident or emergency according to the emergency strategy if the trip leader becomes injured or incapacitated. (See 2.6 Group size).

The last vehicle in the convoy, 'Tail end Charlie', has the responsibility for keeping the trip leader informed of the progress or delays of the group and for ensuring that gates are left open or closed as found by lead driver.

2.5 Communication and authority

As for all outdoor activities involving group participation, all participants and trip leaders should use an agreed and understood system of communication. It is essential that this system be devised before the trip and agreed as a component of the pre-trip briefing.

Every communication system requires a clear full briefing. This may be delivered differently according to organisational preference and, where relevant, the length and complexity of a trip but should include and is not limited to each and every element of the following:

- Convoy procedure
- Introduction of trip leader, support personnel roles and responsibilities, description of trip, location and objectives
- Strategies for environmental conservation including flora, fauna and rubbish removal (See 4 Environment and conduct)
- The nature of the activity, inherent risks, emergency strategy, group conduct and communication requirements

- Equipment, clothing, supplies and fuel requirements required for the trip
- Confirm participants have understood the brief (acceptance of risk)
- Confirm that all participants in control of a vehicle have the appropriate competence
- Confirm that all participants in control of a vehicle are free of the effects of alcohol/drugs
- Explanation of required documentation, including completion and signing of waiver if required.

2.6 Group size

For the safety of both the group and the environment, the maximum group size for a 4WD trip is recommended at 10 vehicles.

Any group of greater than 10 vehicles may be split and each resulting group should independently adhere to AAS before negotiating single track sections and/or fragile environments.

AAS recommend that no more than 30 participants are included on 4WD trips. This is primarily an environmental issue so if a group of greater than 30 individuals is deemed to be reasonable, then extra consideration should be given to minimise the environmental impact of the group at rest areas, camping grounds and during any vehicle recoveries. Trip plans should account for these extra considerations.

3 Equipment

Equipment requirements vary with the objectives of the trip plan and the environmental conditions likely to be endured. When planning equipment requirements for a 4WD trip it is important to plan ahead as much as possible for all eventualities taking into account the appropriate access information and forecast weather conditions.

3.1 Equipment relating to the participants and trip leader's vehicle

The following equipment is the recommended requirement for any vehicle on a 4WD trip and is the minimum considered reasonable to minimise the occurrence of, and appropriately deal with incidents encountered, maintenance and servicing that may be required during the journey:

- Vehicles should be suitable for the planned conditions and those conditions that are reasonable to assume may occur during the trip
- Vehicles should be in a roadworthy condition and should be registered
- It is recommended that vehicle recovery points are mounted to the front and rear of each vehicle
- Each vehicle should also carry minimum recovery gear appropriate for the trip:
 - a dynamic recovery strap (snatch strap)
 - two rated bow shackles (minimum 3.2 tonne rating)
 - one axe or handsaw (pruning and/or a bow)

- one shovel
- spare parts appropriate to the nature of the planned trip (duration, remoteness, track complexity)
- a tool kit suitable for the vehicle and the planned trip. (It is essential to note that the basic tool kit supplied with a vehicle may not be suitable in a remote scenario)
- Each vehicle should also carry the following:
 - a fire extinguisher accessible to the driver
 - sufficient fuel, oil and water for the trip and foreseeable delays/detours
 - vehicle manual
 - a tyre pressure gauge
 - emergency supplies of food and water.

These do not represent an exhaustive list and additional consideration should be given on every trip. Driver training is advised to fully explain additional, more complex provisions.

3.2 Equipment relating to the participants

The following equipment requirements apply to all participants:

- appropriate clothing for the duration and objectives of the trip
- food, water, medication and sleeping equipment
- emergency requirements.

3.3 Equipment used by the trip leader

The trip leader has responsibility for the easy access to and correct use of:

- appropriate primary and emergency communication system for the group
- the first aid kit
- primary navigation equipment.

3.4 Equipment condition, maintenance and storage

All vehicles should be in good condition to be suitable for the trip and regularly serviced to ensure minimal environmental impact.

All equipment stored in or on the vehicles should be secured appropriately and all vehicles should be cleaned before and after each trip and between eco-sensitive areas.

4 Environment and conduct

4WD is a great way to enjoy the tremendous variety of outdoor experiences offered by South Australian and Australian parks, forests and other reserves. The following represent acceptable conduct for the long-term sustainability of both the activity and the environment.

1. Support 4WD drive touring and vehicle based camping as a responsible and legitimate family recreational activity, enjoy your recreation and respect the rights of others.
2. Obey the laws and regulations for recreational vehicles, which apply to public land.
3. Always utilise recognised vehicle tracks and where possible, rest locations. If this is not possible (around camping areas), access should occur only at locations with a robust surface on which the vehicles will have minimal impact.
4. Always seek permission before driving on private land, never disturb livestock or watering points and leave gates as found.
5. Law protects all plants, animals, historical and archaeological sites and geographic features protected, so disturbing any of these is illegal and should be avoided.
 - a. Tying to trees or other vegetation should always be avoided (camping, vehicle recovery). If this is not possible, tree trunk protectors and extreme care should be taken to eliminate damage from rope movement.
 - b. Track erosion should always be minimised and care should be taken when there is potential for excessive wear and tear (wet areas, steep climbs and descents and setting up recoveries.)
 - c. Always adopt minimal impact driving practices and camping practices.
6. Always keep your vehicle mechanically sound and keep your vehicle, camping and personal equipment clean of soil to reduce emissions and the spread of pest plant species, transporting seeds or soil-borne pathogens such as Phytophthora.

Further to this, the following strategies, which effectively minimise disturbance to natural and cultural values, represent acceptable conduct for the long-term sustainability of both the activity and the environment.

Waste

Rubbish: It is the responsibility of the group leader to ensure that no rubbish or introduced matter is left as a result of the group's activity in an area. This particularly applies to all food or drink packaging, food scraps and activity equipment. Leaders should plan to carry rubbish receptacles sufficient to enable all group-generated rubbish to be removed from the area. Where practicable, leaders should encourage participants to remove rubbish left by previous users.

Human waste: Faecal wastes are to be managed and disposed of in line with environmental regulations and land manager directions. This means that where toilet facilities are provided, these must be used. Where camping is permitted and no toilet facilities are available, toilet wastes must be buried at least 100 metres from a watercourse. If it is not feasible to bury wastes or to bury them at least 100 metres from a watercourse (e.g. narrow river valley, cliff areas), group leaders should plan to use equipment (e.g. 'poo-tubes') that enable the wastes to be removed and disposed of at a facility designed for this purpose.

Fire

Fire Bans: In most parks, the fire danger season in South Australia usually extends from 1 November to 30 April, depending on seasonal conditions. No wood fires are permitted in parks during this time. Some parks have year round bans on wood fires. Open flames are banned in all parks on days of extreme fire danger. These are declared by the Country Fire Service (CFS). Parks may be closed to visitors on Total Fire Ban days. The onus is on the leader to check the fire ban status for the area they are visiting. Phone or visit the Department for Environment and Heritage or CFS Office for more details.

Camp Fires: Native vegetation within reserves is protected. In non-reserve areas, dead trees and fallen logs play an important role in the environment. In some parks, wood fires are prohibited or restricted. Gas or liquid fuel stoves are preferable. Where fires are permitted they must be:

- lit in existing fireplaces where possible or in a properly constructed fireplace or pit (minimum 30cm deep and a maximum of one metre wide) and returned as closely as practicable as it was
- cleared of flammable vegetation for at least three metres around the fireplace or pit
- kept to a minimum size necessary for cooking, minimising disturbance to the surrounding area
- attended at all times
- extinguished with water
- avoided if fuel is scarce
- avoided if at all unnecessary or where doing so will not comply with the minimal impact approach.

Camping

- Camp at established campsites where possible
- Make campsites away from water resources (at least 20 metres from any stream) and allow animals undisturbed access
- Use floored tents with poles
- No trenches around tents
- Use toilet facilities where available
- Avoid using any soaps or detergents. If they must be used, use only biodegradable soaps and detergents. Dispose of washing water at least 50 metres from any water source
- Wash all soil from camping and personal equipment and vehicles before leaving home or moving between locations, in order to avoid transporting seeds or soil-borne pathogens such as phytosphthora.

In addition, participants are also expected to:

- try to avoid tracks and other areas which will be intrinsically more prone to erosion, especially with larger groups

- use boot washing and or hygiene stations to assist in the prevention of phytophthora
- make reasonable efforts to minimise the impact of the group on others
- assist other parties in difficulty providing this action does not adversely effect the safety of the group
- be diplomatic with other groups and other recreational users of the area
- try to minimise noise.

5 Further information

AAS encourage all operators, owners, leaders, support personnel and participants to:

- Undertake appropriate leadership and 4WD training.
- Obtain relevant information from map shops, camping stores, 4WD professionals
- Contact South Australian Association of Four Wheel Drive Clubs Inc:
www.saafwdc.asn.au