Introduction

This information sheet sets out what the Health and Safety Commission’s Adventure Activities Industry Advisory Committee (AAIAC) considers good practice for the provision of combined water and rock activities.

Combined water and rock activities are activities which involve both water and rock environments, and the hazards associated with those environments. There are a number of different names given to the range of combined water and rock activities, including:

- sea level traversing (primarily a dry, rock climbing activity);
- ‘coasteering™’ (usually a coastal, wet activity often involving swimming and/or jumping from a height into water);
- canyoning (usually a wet activity, which traditionally involves the descent of a steep water course and sometimes involves technical rope work);
- adventure swimming (another name for coasteering or a non-technical variation of canyoning);
- gorge walks, ghyll scrambles or scrambles (can be wet, dry or alternating);
- river running (swimming down white-water rapids).

This list is not exhaustive. This information sheet provides generic information which can be applied to most situations involving combined water and rock activities.

Risk assessment and accident prevention

Under health and safety legislation, as an activity provider you have a duty to ensure the health and safety of those who participate in activities, ie group leaders and participants. You also have a duty to ensure that no one else is harmed as a result of those activities, ie non-participating members of the public.

As part of this duty, you must ensure that a risk assessment is undertaken by a competent person which covers those risks that are reasonably foreseeable. This includes assessing and planning for contingencies arising from foreseeable changes. The AAIAC guidance Adventure activities centres: Five steps to risk assessment will help you develop your risk assessment.

As there are so many different factors to consider each time an activity takes place, you will need to determine what the site specific hazards are at any one time, including the hazards associated with the route to and from the venue where the activity is taking place. However, when producing a general risk assessment for combined water and rock activities, you may find it helpful to consider the following:

Impact with a solid object

- Rocks falling from above;
- falling onto rock, etc;
- jumping/ falling onto submerged rock;
- jumping from a height into water;
- being swept against something solid.

Drowning

- Being trapped under water;
- repeated submersion in stopper waves or sea swell;
- suddenly rising water, eg 'freak waves', flash floods, dam releases;
- slowly rising water, eg trapped by rising tides or rising river levels;
- falling into water and being swept away;
- sudden immersion (dry/secondary drowning etc).

Hypothermia

- Inadequate personal clothing or equipment during or after the activity;
- submersion, eg being swept out to sea, extended immersion.

Controlling the hazards

Group leader/instructor competence

One of the keys to ensuring the safety of participants during an activity is the competence of the group leader. In order to ensure that group leaders have the necessary competencies, activity providers need to put in place a system to identify and verify the required competence for each venue. The risk assessment will help identify what skills, knowledge and competencies are needed for leaders/instructors at each venue, but they will probably include knowledge, skills or experience of:

- climbing (rock activities);
- characteristics of water (ie surf, tides, currents and river flows);
- site specific hazards;
- leading a group (including identifying the competencies within the group);
- instruction techniques;
- communication skills;
- life saving;
- rescue and emergency techniques;
- first aid;
- equipment needed (including emergency equipment);
- weather and water conditions.

One of the key competencies any group leader/instructor needs to have is the ability to know when it is inappropriate to allow the activity to take place, or when it is too dangerous for it to continue.

In order to ensure that leaders/instructors have and maintain the necessary skills, you should implement a programme of training, which includes site specific training. This will often include training at the venues themselves and ideally should include at least some practical incident and accident scenarios and responses. Once obtained, these skills should be tested on a regular basis (depending on the frequency of the activity) to ensure an appropriate skills level is maintained. You should record this training and testing.

**Competence of participants**

It is recommended that you have a policy of informing the participants about the nature and extent of risks, and what to expect from the activity. This is particularly important where the participants may have no concept or prior knowledge of this type of activity. You should make the risks clear, and offer realistic and uninhibited options to any participants who, as a result, wish to decline the activity.

**Group size**

The size of the group and the number of instructors needed will depend on a number of factors including the skills and competence of the group, the venue used and the experience of the group leader. You will need to ensure that for each activity the size of the group is appropriate to the skills, knowledge and overall competence of the group leader and members of the group. If necessary, you should take measures such as providing additional instructors, reducing the size of the group, or splitting the group and providing a competent leader for each group.

**Briefings/communication**

You should tell participants what they can do to help ensure their own safety. It may not be appropriate for instructors to deliver all relevant instructions in one briefing, and verbal communication at some venues can be very difficult. You should decide whether other systems of communications are necessary and introduce them where they are needed.

**Picking the venue**

It is vitally important to ensure that the venue selected is suitable for the capabilities of the group. It is advisable to have alternative venues and start/finish and access/exit points so that the degree of difficulty and the duration of the trip are at the right level for the group. On the day, the most appropriate venue or variation on the venue should be used taking into consideration:

- weather conditions;
- competence and expectations of the group;
- the number and experience of staff available.

In addition, you will need to identify emergency exit points and ‘safe areas’ before the activity takes place in case there is a need to stop the activity at short notice.

**Selecting clothing and equipment**

What is appropriate will vary from day to day, and venue to venue. For most activities (particularly those that involve entering the water) a buoyancy aid and a helmet will be needed. You should consider whether rescue or emergency items are needed. As stated earlier the risk assessment should identify what equipment is needed and the competencies needed to use it safely.

It is essential that you have a system for ensuring that the equipment is maintained and checked for suitability before it is used.

**Forecast of conditions**

You should have a policy for obtaining and interpreting weather forecasts, water levels, sea state etc. It must be clear who is to do this, when it is to be done, and what action they will take for a range of possible forecasts. Appropriate action could include, for example, modification of the venue, change of venue, or even the cancellation of the activity for that day.

**Emergency action plans**

All those involved in the activity need to be aware of their responsibilities in the event of an emergency. You should put in place a system for ensuring that the relevant authorities are notified so that staff at the base know what to do and who to contact in an emergency. Those leading the activity need to have the necessary competencies, and if necessary the equipment, to deal with any immediate problems and know how to get help if it is needed.

**Safety boats**

Some providers find it helpful to have groups accompanied by, or have access to, a support boat. If the precautions mentioned above have been considered
this is rarely needed. However, it has been effective, for example, where there is a risk of the group being cut off in sheltered but inescapable bays by a combination of delays and rising tides.

**First aid**

Your first aid considerations will generally include a procedure for rewarming cold participants and should take into consideration the nature of the venue, transport arrangements etc. We advise you to have some scenario-based training so that the necessary skills can be developed to deal with the types of injury that could be caused during the activity. Activity providers will also need to consider the implications of staff dealing with cuts sustained on sharp rocks, which is a common injury.

**Further advice**

You can obtain further advice and guidance from the following organisations:

**UK Mountain Training Board (UKMTB)**, Siabod Cottage, Capel Curig, Conwy LL24 0ET, Tel: 01690 720272, Fax: 01690 720248, Email: theukmtb@aol.com

**British Canoe Union (BCU)**, Adbolton Lane, West Bridgford, Nottingham NG2 5AS, Tel: 0115 982 1100

**National Caving Association (NCA)**, Monomark House, 27 Old Gloucester St, London WC1N 3XX

**Royal Life Saving Society (RLSS)**, lifesavers@rlss.org.uk

**Surf Life Saving Association of Great Britain**, River House, Broom, Warwickshire, Tel 07800 875911, Fax 01789 773389

**British Surfing Association**, 01736 360250

**Relevant qualifications**

Mountain Instructor Certificate (MIC), Mountain Instructor Award (MIA), British Mountain Guide (BMG), Cave Instructor Certificate (CIC), one of the BCU sea kayaking, surfing or white water rescue awards, Swiftwater Rescue Technician, Surfing awards, STET or other rescue experience and/or qualifications and a First Aid qualification.

While every effort has been made to ensure the accuracy of the references listed in this publication, their future availability cannot be guaranteed.

**Further information**

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel: 01787 881165 Fax: 01787 313995 Website: www.hsebooks.co.uk (HSE priced publications are also available from bookshops.)

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

For information about health and safety ring HSE's InfoLine Tel: 08701 545500 Fax: 02920 859260 e-mail: hseinformationservices@natbrit.com or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG. You can also visit HSE's website: www.hse.gov.uk

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