



**national
water safety
forum**

Beach Advisory Group

DRAFT - GOOD PRACTICE GUIDANCE FOR COASTEERING PROVIDERS

VERSION 3: MARCH 2010

BACKGROUND

The following document contains safety advice that providers of coasteering activities should consider when drawing up their own plans or guidelines. It should not be considered in isolation to a provider's other safety practices and should not be taken out of context.

This guidance represents what is currently considered to be best practice. This guidance is not compulsory. Providers may use alternative systems or procedures that have been identified through a robust risk management process; these should be ideally benchmarked against a comparable industry.

Following this guidance will normally be enough to comply with the Adventure Activities Licensing Regulations (AALR 2004).

SCOPE AND DEFINITION

Coasteering involves traversing along a stretch of inter-tidal zone, often as part of an organised group activity. Participants travel across rocks and through water, using a variety of techniques including climbing, swimming and jumping into water. Wetsuits, buoyancy aids are commonly used for the activity. The following advice is based solely on providers offering coasteering activities. Further advice should be sought for operators providing additional activities to the public.

The following advice has been obtained from members of the National Water Safety Forum's 'Beach Advisory Group' – Working Group for Coasteering Safety. Members include; RNLI, ROSPA, MCA, RLSS UK, AALS, coasteering providers, governing bodies and associations. Much of the content is based on AALS's safety checklist for combined water/rock activities - C/Int34v10.

SAFETY GUIDELINES

The following safety guidelines are split into three key sections:

1: Pre-activity safety guidelines

2: During activity safety guidelines

3: Post-activity safety guidelines

1.0 PRE-ACTIVITY SAFETY GUIDELINES

1.1 Risk in context – as safe as necessary not as safe as possible:

‘Water as a resource for recreation and leisure presents the attractions of challenge and of being at one with nature. However, any adventure activity has an element of danger to offer these challenges; adventure infers that there is an element of the unknown and it is this, which presents the biggest challenge.

The problem is how to balance the need to offer excitement and the feeling of potential danger with methods to ensure that the dangers remain a feeling in the minds of the water user and not a reality in terms of accidents.’

An appropriate risk assessment for coasteering should be carried out by the centre/coasteering organisation and by a competent and experienced member of staff who has knowledge of the risk assessment process and the activity along with Standard or Normal Operating Procedures (S(N)OP's) and Emergency Action Plans (EAP's).

1.2 Risk analysis and management systems

The rationale for conducting a risk assessment include:

- Providing the basis for a risk management plan
- Improving safety, reducing the risk of death or injury at the site
- Ensuring the best use of resources and encourage effective management and cost effective operations
- Enhancing client satisfaction and reducing the potential for litigation stemming from accident and management practices
- Providing guidance for the development of policy, procedure and practices
- It is a legal requirement

Conducting a Risk Assessment

The World Health Organisation offers the following advice in relation to the assessment of hazard and risk in its guidelines for safe recreational water environments (coastal and fresh waters):

‘Assessment of hazard and risk inform the development of policies for controlling and managing risks to health and well-being in water recreation.’

‘The assessment of a coastline or water should take into account several key considerations, including:

- The presence and nature of natural or artificial hazards
- The severity of the hazard as related to health outcomes
- The availability and applicability of remedial actions
- The frequency and density of use; and
- The level of development.

The Health and Safety Executive has provided some generic guidance on practical risk assessments and also sets out a simple 5-step guide to conducting a risk assessment.

1. Identify hazards
2. Decide who might be harmed and how
3. Evaluate risks, evaluate existing precautions and determine if more is required
4. Record findings
5. Review or establish a review process.

The biggest single factor affecting the safety of any participant taking responsibility for their own safety in any adventure sport is their own experience, competence, knowledge and judgement.

The key factor therefore in any led activity such as coasteering is the experience, competence, knowledge and judgement of the leader, instructor or guide.

Individual participants undertaking coasteering therefore should consider the following issues activity and providers of coasteering experiences for others. Providers in particular should note that in many cases their clients will be novices in the sport.

Some example of coasteering hazards to be considered during a risk assessment an analysis of the risks that is inherent or can be introduced to a coasteering activity:

1 - Impact

Examples:

- Rock falling from above
- Falling or slipping on to rocks below
- Jumping/falling onto submerged rocks
- Jumping from a height into water
- Being swept onto rocks.

2 - Drowning

Examples:

- Falling into water
- Entrapment under the water
- Repeated submersion in waves or sea swell
- Unpredicted tidal changes
- Being swept out to sea
- Tidal cut off
- Getting caught in rip currents
- Sudden immersion into cold water (dry drowning etc).

3 – Effects of cold water

Examples:

- Inadequate personal clothing or equipment during or after getting wet
- Submersion hypothermia e.g. being swept out to sea
- Over exposure to cold and windy conditions
- Exposure to high temperatures, hypothermia, sunburn and dehydration.

The Control Measures

Control measures could be thought of in four contexts:

1. Where there is no (realistically) foreseeable possibility of a participant ending up in the water
2. Where participants MAY end up in the water
3. Where participants WILL end up in the water
4. Where participants MAY realise an injury from a dry incident.

It would be appropriate, in cases where participants MAY end up in the water to apply the control measures (and test them accordingly) as though participants WILL end up in the water.

Because of the large number of variations of activities and the wide range of local conditions and site-specific hazards universal guidelines must be augmented by site-specific policies and practices.

It should be very apparent that not all of the issues would apply below to any one venue, participant or provider.

1.3 Swim and fitness requirements:

It is important that each participant is made fully aware of the physical nature of coasteering and the type of environment they are expected to interact with.

It is recommended that participants are confident in the open water wearing a wetsuit and buoyancy aid to a level that suits the environmental conditions. Attention must be given to maximum distance from egress points. In specific environments where participants maybe further than 25m from an egress point, a higher level of water confidence maybe needed.

It is essential that providers check each participant's physical abilities before the start of the activity. Providers should also advise participants never to undertake coasteer type activities on their own when not part of an organised coasteering provider.

1.4 Medical requirements:

It is important that coasteering providers are aware of any medical conditions that a participant may have that will affect their ability to undertake coasteering in a safe and enjoyable manner.

It is recommended that all participants complete a standard medical declaration form listing any pre-existing or current medical conditions that could affect their safety and that of others.

Medical information should be treated confidentially and be obtained in a manner that respects the rights and sensitivities of the individual. Please allow time for the participant to discuss any medical concerns with a guide on a one to one basis.

It is best practice for individuals to carry their own medication and administer medication by themselves. However, in the coasteering environment, this may not always be possible and therefore it may be necessary for coasteering guides to carry participant's medication.

If a guide is to carry medication for a third party it is recommended that it is labelled clearly with the participants name and exactly what that medication is for and how best administered. Medication should be carried in a waterproof container/bag. It is important that the guide and participant always remain in the same group.

1.5 Age requirements

Centres offering coasteering to participants under the age of 18 should conform to AALS licensing requirements and are subject to inspection.

There need be no upper age limit as long as the participant meets the necessary insurance and medical requirements as determined by the operator. Parents ought to be involved in determining the suitability of sessions for very young participants.

1.6 Identification of group competence:

A policy ensuring identification of group competence is essential, identifying experience, special needs, physical and medical condition of the participants is advised. Particular attention should be paid to establish the water confidence and swimming ability of participants before undertaking activities.

As a result of identifying group competence it would be equally acceptable to either:

- a. Select the venue on the basis of the groups abilities; or
- b. Select the client group on the basis of the venue.

1.7 Guide safety briefing:

Basic principles that guides should address prior to a group's safety brief:

- Which guide is leading the coasteering session
- Can the chosen route be led safely on *that* day with *that* group by the chosen guide(s)
- Plan B - If the sea conditions change or other factors vary or deteriorate what are the alternatives
- Escape routes and stopping the session early
- Equipment checks.

The **CLAP** mnemonic is a suggested format when briefing participants:

Communication
Line of sight
Avoidance is better than cure
Position and maximum usefulness

1.8 Participant safety briefing:

There will generally need to be a policy on the existence, content and presentation of a safety briefing. Participants should be advised on what they can do to help ensure their own safety. It may not be appropriate for instructors or guides to deliver all relevant instructions in one briefing. Verbal communication at some venues can be very difficult so prior thought should be given to what needs to be explained, where and when. Providers should decide whether a system of hand signal is necessary and introduce this at an appropriate point.

- Introduction of coasteering guides and their role
- Description of coasteering i.e. what is coasteering
- How to enter the water safely
- Swimming alongside the cliffs, submerged rocks
- Exiting the water safely
- Climbing on the rocks
- Jumping procedures and participants competence and confidence
- Swimming and walking through caves
- Marine life (cuts, stings, poisons, barnacles etc...)
- Bunch up procedure
- Emergency procedure in case of an accident e.g. immediately halt activity
- Emergency escape routes
- Signals
- Group safety
- Self-awareness and awareness of others
- Communication
- Make sure that everybody is happy and understands all procedures before entering the water.

1.9 Forecasting conditions:

A policy for obtaining and interpreting weather forecasts, water levels, sea state etc... is generally needed. 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. These could include, but may not be limited to, modification of the venue, change of venue, cancellation and/or return of payment. If the addition of an assistant guide is the response, then there must be a mechanism where-by a suitable person can be deployed in the given time span.

1.10 Indemnity/insurance & acknowledgement of the risks:

A policy on informing the participants of the nature and extent of risks, and what to expect from the activity is encouraged. This is particularly important where the participants may have no concept or prior knowledge of this type of activity.

It may be unreasonable to expect a commercial provider to detail the hazards in their primary advertising. However, it may be reasonable, for example, to leave this information until the point of booking or even (in some cases) to the point of departure. The identification of risks should be clear, and allow realistic and uninhibited options to any participants who, as a result, wish to decline the activity.

Coasteering providers should ensure that each participant acknowledges the risks involved in coasteering. An Acknowledgement of Risk form should outline any associated risks and fitness/medical requirements. It is important that such forms capture the participants name, contact details, contact person, etc. and their signature to confirm they appreciate the risks and agree with the terms and conditions outlined by the provider. N.B. This is NOT a disclaimer and does not indemnify the provider from any statutory responsibility.

Coasteering providers should ensure they have correct and in date insurance for conducting coasteering to the public.

1.11 Identification of route options:

It will be beneficial to have the option of alternative routes or alternative start or finish points. In some cases the degree of difficulty or the duration of the trip or both can be determined by varying these. On the day the most appropriate route or variation on the route could be used depending on factors such as the weather conditions, experience and expectations of the group, group number and experience of staff available.

Guides should allow for groups and individuals to progress within a selected route. An example would be to start with low-level jump before asking a group or individual to jump from a highest platform or ledge on the chosen route.

New routes should only be considered for competent and experienced guides. Conservation and interaction with the natural landscape should be considered whilst selecting a new or alternative route.

1.12 Emergency action plans and pre departure communications:

Emergency action plans should be produced for the following situations:

- 1: Support personnel on shore
- 2: For the guide leading the group

Support personnel on shore - This will need to be site specific. Who contacts whom? When and how does an over-due group become a 'stand-by for action'? When and how does it become 'action required' and what action, and by whom?

For the guide leading the group - Since a rapid response to a complex situation may be required, the emergency action plan may well be used to guide an instructor's training.

The MCA (Maritime and Coastguard Agency) is responsible in the UK for coordinating maritime search and rescue. As such the MCA have advised

the following systems be implemented and operated when operating coasteering activities:

- Before setting out, the group should leave their planned route and itinerary with a competent person who could contact the Coastguard if they believe the group is overdue.

- That person should also have the following information with them:

- ***Name of Organisation***
- ***Number of participants/guides/total number***
- ***Time and place of departure/arrival***
- ***Route to be taken***
- ***Contact details of group***
- ***Name of group leader***
- ***Vehicle details (make and registration)***

- Before setting out the group should also contact the Coastguard to let them know the area in which Coasteering groups will be operating during the day.

- At the same time it would be expected that the group could ascertain tide/weather information from the Coastguard or from another source before they set out.

- When out during the activity the group should carry suitable means of raising the alarm, if possible carrying more than one means of communication, such as mobile phones in waterproof covers or handheld VHF radio.

Alternative arrangements may have been agreed with the local Coastguard. In such cases, always follow the guidance/communications that were agreed. If in doubt, providers should use the system detailed above or contact their local Coastguard Sector Manager for further advice.

1.13 Guide/Participant ratio:

It will generally be appropriate to have a policy on ratios, maximum group size, use of assistants, etc. This should take account of group management difficulties associated with only having one guide, which can arise at some venues. Similarly some providers find it useful to have two separate groups operating at the same venue, and available to give mutual support if required.

It is recommended that the group size does not exceed 10 with a single guide or 15 with two guides. The ratios will need to be decreased if the participant's ability, local conditions or guide experience is reduced or impaired.

1.14 Checking PPE:

Before a coasteering session commences, guides should check participant equipment for any defects, ill-fitting sizes or incorrect installation. Participants should also be told how to check their buddies PPE during the coasteering sessions.

If possible, extra equipment should be taken to the coasteering location to allow participants to change PPE in case a size change is required or the original equipment gets damaged.

Participant personal protective equipment:

It is important that all participants have the correct safety equipment prior to leaving the activity centre and allowed the opportunity to try it on to ensure it fits well. Equipment should be available in a range of sizes. The following equipment is recommended for all participants, regardless of ability and experience:

- ***Helmet (fit for water based activities) – BS/EN type approved***
- ***Buoyancy Aid (min 50N) – CE marked (with adjustable shoulder straps, side panel adjusters and chest/waist straps)***
- ***Full-length wetsuit (suitable size and thickness for environment)***
- ***Wetsuit boots, trainers or canyoning boots (closed toes)***
- ***Whistle***
- ***Watch***

Instructor safety equipment:

Guides should have the following PPE and carry additional selected equipment to support the group whilst conducting a coasteering session.

Personal:

- ***Helmet (fit for water based activities) – BS/EN type approved***
- ***Buoyancy Aid (min 50N) – CE marked (with adjustable shoulder straps, side panel adjusters and chest/waist straps)***
- ***Wetsuit (suitable size and thickness)***
- ***Wetsuit boots, trainers or canyoning boots (closed toes)***
- ***Whistle***
- ***Knife***

Additional safety equipment:

- ***Day/night or/and mini signal flares***
- ***Rescue tube***
- ***Throw line (min 15m)***
- ***Fins***
- ***Carabineer and sling***
- ***Communications - Handheld VHF and/or mobile telephone***
- ***Dry bag for medication, group names, maps, knife and energy food/water***
- ***A standard first aid kit supplemented as appropriate for the coasteering environment. It is recommended the first aid kit only contains supplies that can be delivered by the level of the first aid training obtained by the guide)***

2.0 DURING ACTIVITY SAFETY GUIDELINES

2.1 Session duration:

The duration of the session needs to be appropriate to the age, abilities, equipment, expectations, etc of the participants (individually and collectively).

- A rest part way through the session with food and drink
- If individual or group members seem uncomfortable about a second session, the lead guide should discuss with the

individual and discuss his or her's own requirements and safety options for the second session.

- Change of wetsuit for second session due to adverse weather and sea conditions. A client or group member may require changing their 3mm to a 5mm wetsuit.

2.2 Route cards:

Before the coasteering session commences, it is advisable to complete route cards for the selected journey. Route cards should have the following information:

- Number of participants/names
- ETD and ETA
- Route details (OS or Lat/Long)
- Any medical concerns
- Weather details
- Emergency contact information
- Other important information

2.3 Buddy system:

It is recommended that participant's could be paired up with other participants of a similar ability to observe each other's welfare and safety during a coasteering session. When there are odd numbers a group of three could be established.

2.4 The unexpected 'panicker':

Sometimes even strong swimmers will panic when they fall or jump into deep, cold water. They may not be able to help themselves and their violent actions can sometimes make a rescue very difficult. It is good practice to anticipate this by:

- a) Carrying out realistic scenario based training (in a controlled environment) on the importance and practicalities of reaching, throwing and swimming rescues, particularly of struggling 'casualties'. In some situations a throw-bag may be appropriate, although its use would need to be practiced.
- b) Positioning a competent person where they can affect a rescue, preferably by reaching or throwing or wading.
- c) Throughout the session always carry a piece of rescue equipment (e.g. rescue tube) with which to reach or throw to participants who need assistance in deep water.

2.5 Checking a site - jumping into water:

On arrival at a planned jumping location it is advisable, particularly after flooding, at a new venue or an unfamiliar stage of the tide to carry out a reconnaissance. Depending on the location and proposed activity this could include:

- Going down to water level to examine exit points. It may be appropriate to practice the exit, to ensure that participants will be able

to get out. Determine whether someone should be located there to assist with exiting and whether they should have equipment to reach or throw to a swimmer in difficulty.

- Wade in and, if necessary, duck-dive to check the bottom for obstructions, depth, current etc... It may be appropriate to be attached to a throw line, although not if there is a strong current. A mask and snorkel search might also be considered at some venues.
- It is recommended that guides check unfamiliar depths prior to any jumps taking place. Lowering a weight on the end of a line with markers indicating depth in feet or metres is the most commonly used system for determining depth.
- There may be considerable advantages if the participants also wade in as a trial, particularly if the activity will involve jumping in from a height. The shock of sudden immersion in cold water can be very overwhelming.
- Careful consideration must be given to the height of the jump. It is recommended that if possible, participants start with lower jumps and are only allowed to progress to higher jumps if their technique is acceptable. Jumps should be no higher than 5m.
- Ledges and projections: If it is necessary to jump outwards in order to clear ledges and projections or simply to reach the water, it is recommended that participants start with jumps which do not require this, so as to build up technique and confidence. They should not be allowed to progress to higher jumps until both are acceptable.
- At the take off point for the jump, guides should assess the possibility of being pulled off the ledge by a participant. They may find it necessary to secure themselves to something secure. This allows the guides to approach the edge to give assistance or support.

2.6 Alternative exits:

Some venues have a number of possible entry and exit points. Knowledge and familiarity of these escape routes has clear benefits, particularly if it becomes necessary or desirable to cut a trip short. Some consideration should be given to any extra equipment that may be required for particular exits, ascents or a retreat.

2.7 Plan B option:

Accidents have happened in the past when groups did not have an alternative plan in mind. NOT having a plan B can and has resulted in the group going ahead even though they knew the conditions were far from ideal.

2.8 Remote locations:

Extra considerations should be given to safety when operating in remote and isolated locations. These considerations should factor in to the risk assessment. Factors can include:

- Communications

- Emergency help
- First aid equipment
- Participant/guide ratio
- Group and guide experience

3.0 POST ACTIVITY SAFETY GUIDELINES

3.1 Post equipment checklist:

All equipment should be checked on return to ensure no damage has been sustained during the coasteering session.

It is recommended that a system for checking, recording and labelling all equipment be established and held in a central place.

3.2 Debrief and lessons learnt:

There should be an opportunity for each participant to feed back his or her thoughts on the session in a discreet way.

3.3 Staff feedback:

Guides should be able to feedback and review coasteering sessions and have the opportunity to learn from sessions and deal with any specific issues.

FURTHER INFORMATION

AALS

Adventure Activities Licensing Service
44 Lambourne Crescent
Cardiff Business Park
Llanishen
CF14 5GG
Tel: 029 20755715
Email: info@aals.org.uk
Web: www.aals.org.uk

MCA

Maritime and Coastguard Agency
Spring Place
105 Commercial Road
Southampton
Hants
SO15 1EG
Tel: 02380 329100
Web: www.mcga.gov.uk

RLSS UK

Royal Lifesaving Society UK
River House
High Street
Broom
Alcester
Warwickshire
B50 4HN
Tel: 01789 773994
Web: www.lifesavers.org.uk

RNLI

Royal National Lifeboat Institution
Prevention and Lifeguards
West Quay Road
Poole
Dorset
BH15 1HZ
Tel: 01202 663000
Email: beachsafety@rnli.org.uk
Web: www.rnli.org.uk

RoPSA

**Royal Society for the Prevention of Accidents
RoSPA House
Edgbaston Park
353 Bristol Road
Edgbaston
Birmingham
B5 7ST
Tel: 0121 248 2000
Web: www.rospace.com**