

# **Burntwood Sub Aqua Club – Open Water Diving Risk Assessment**

## **Shore and Boat diving**

This document should be read by all Instructors/divers diving in open water on sessions organised by Burntwood Sub-aqua Club, and will be made available to all club members via an annual distribution and on the club website. Whilst this Risk Assessment is intended to cover diving related activities, several of the risks identified will also apply to snorkelling and even swimming.

It is the Dive Managers responsibility to carry out a practical risk review prior to every diving session, be it from shore or a boat, based on this generic risk assessment, plus consideration of prevailing conditions including seastate and incoming weather. If conditions change such as to be significantly different from those applying at the time the original assessment was undertaken, then the Dive Manager shall reassess the situation accordingly.

Hazards should be continuously monitored during any dive or dive related activity. The Dive Manager should be prepared to put any contingency plans into place at any point during the diving activities. “BSAC safe diving rules” to be followed by all persons at all times.

### **Standard Controls**

Divers shall dive within the restrictions of their training and experience and all diving shall be carried out in accordance with BSAC Safe Diving Practices and Burntwood Sub Aqua (BSAC) Branch Rules. It is the responsibility of each individual diver to undertake personal risk control measures as befits their level of training and experience and, if appropriate, the Instructor shall brief the trainee on the risks associated with the exercise. All divers (including trainees) must have completed a medical self-declaration form.

Divers should ensure that their equipment is properly maintained and functional. BSAC guidelines state demand valves to be serviced annually.

BSAC will provide a designated Dive Manager. This is in accordance with the Safe Diving practises as designated by The British Sub Aqua Club.

Boat handlers should ensure the boat is seaworthy, carrying the correct fuel, flares and toolkit for the journey and that the boat is not overloaded.

In the event of children or vulnerable individuals being present on the diving activities, the club will take special measures to ensure safety based on the specific needs of the people being trained. We have two qualified welfare officers (Mark Beere and Sue Walker) who would ensure the general welfare and safety above and below water. This would include supervision of changing rooms; one to one instruction; safety divers; dive manager; fitness to dive questionnaire; assistance with kitting up; individual assessment of fitness to dive;

RA ref Open Water. OW risk assessment 2.9.2015 MD SMITH

## Entering the changing rooms

<b>Hazard:</b>	<b>Risk of:</b>	<b>Risk Eval</b>	<b>Controls:</b>	<b>Immediate measures to deal with consequences if risk does occur:</b>
Slips and trips	Injury bumps, cuts etc due to slips on wet or hard surfaces	med	All users to take care and sit on the benches if available when changing	Assess injury. Apply first aid and hospitalise if required

## Kitting up

<b>Hazard:</b>	<b>Risk of:</b>	<b>Risk Eval</b>	<b>Controls:</b>	<b>Immediate measures to deal with consequences if risk does occur:</b>
Skin abrasion due to wearing diving kit	Minor injury	low	Trainees to be advised to take care when kitting up as some equipment is sharp	Treat any cuts with plasters or hospitalise if serious
Falling whilst kitting up	Possible major injury	medium	Trainees to follow good practice when putting on scuba gear (buddy to help) and use 'figure of four' and a wall / steady support when fitting fins. Instructor to ensure this happens.	Assess injury. Apply first aid and hospitalise if required
Falling heavy objects – weight belt, scuba gear etc	Broken bones	medium	Extreme care to be taken. Falling weight belts and scuba equipment can break bones. Instructor to advise trainee	Assess injury. Apply first aid and hospitalise if required

## The dive itself:

Equipment failure	Serious injury to diver/death	High	Divers to perform a buddy check before entering the water. It is recommended that divers carry-out a bubble check once under the surface. Equipment to be well maintained and regularly serviced.	Divers to abort dive and return to surface. Assistance from buddy as required.
Running out of gas	Serious injury to diver/death	High	Divers to perform a buddy check before entering the water, including gas levels. All scuba sets to be fitted with cylinder pressure gauges. Instructor to monitor trainees gas level during the dive. All divers should carry an alternative air source, i.e. Octopus, Air II, pony or twin-set.	Diver to use own or buddy's AS.

Hazard:	Risk of:	Risk Eval:	Controls:	Immediate measures to deal with consequences if risk does occur:
Cold	Hypothermia	Medium	Divers to choose appropriate, well fitting exposure protection in good condition. Divers to be prepared to exit water early if cold. Divers to monitor buddies, and in particular trainees, for early signs of cold. Trainees to be briefed on appropriate divers' signals to indicate chill. Divers to keep towel at side of pool if prone to suffering from cold.	First Aid to be administered. contact emergency services, as required. Hospitalise, as required.
Diver falling from ladder / lift when exiting water or generally falling during entry/exit	Serious injury to diver beneath them Injury to diver/damage to equipment	Medium	Divers to ensure they are never beneath a diver who is climbing up a ladder or entering/exiting water	Recover casualty from water and administer first aid. Hospitalise, as required.
Drowning	Serious injury/death of diver/snorkeller/swimmer	Medium	Monitoring by Instructor with trainees. Monitoring by dive manager. Training to be conducted in depths suitable to skill levels.	First Aid to be administered. contact emergency services, as required. Hospitalise.
Ear damage	Injury to diver	Medium	Trainees to receive specific instruction on ear clearing. Divers//snorkellers to avoid diving when suffering from a cold.	Assistance from Instructor/buddy.
Heart attack	Death	Medium	Divers to complete medical self-declaration/referral to medical referee.	First aid to be instigated. contact emergency services. Hospitalise.
Uncontrolled ascent/barotrauma	Serious injury to diver	Medium	Divers should ensure they are properly weighted and capable of making a safe and controlled ascent, and that inflation and dump systems are working correctly. If training, Instructor to monitor student. Instructor/student ratios to be in accordance with BSAC recommendations. Progressive training.	Diving monitored by Dive Manager. One to one instruction with inexperienced divers.

<b>Hazard:</b>	<b>Risk of:</b>	<b>Risk Eval:</b>	<b>Controls:</b>	<b>Immediate measures to deal with consequences if risk does occur:</b>
Heat	Hyperthermia	Low	Divers to be aware of the risk of overheating when wearing drysuit/wetsuit and undertaking strenuous activities. Divers to monitor buddies, and in particular trainees, for signs of overheating/exhaustion.	First Aid to be administered. Maintain hydration. contact emergency services, as required. Hospitalise, as required.
Injury from falling cylinders	Injury to diver/general public	Low	Divers to avoid leaving cylinders standing upright. Trainees to receive instruction on equipment use and storage. Monitoring by Instructor/dive manager. Good boat practice.	First Aid to be administered.
Lifting dive gear	Injury to diver	Low	Seek assistance, if required, when moving heavy dive gear, e.g. twin-sets. Recovery from water to be undertaken by more than one person, if necessary.	First Aid to be administered.
Mask squeeze	Injury to diver	Low	Trainees to receive specific instruction on mask equalisation. Only masks which enclose both eyes and nose in same airspace to be used.	Assistance from Instructor/buddy.
Panic	Injury to diver	Low	Monitoring by Instructor with trainees. Instructor/student ratios to be in accordance with BSAC recommendations. Progressive training.	Assistance from Instructor.
Slipping/tripping	Injury to diver/damage to equipment	Low	Divers should be aware that wet surfaces are slippery. No running. Trainee/inexperienced divers to be briefed on how to put on and take off scuba equipment and to be aware of and look out for possible hazards while walking or moving in diving equipment. Divers should exercise caution when carrying diving equipment. Fins to be removed when walking on land. Monitoring by Instructor/Pool Manager.	Remove casualty from danger and administer first aid. Hospitalise, as required.

## General

Hazard:	Risk of:	Risk Eval:	Controls:	Immediate measures to deal with consequences if risk does occur:
Fire – in boat	Serious injury/death	Medium	Dive Manager or suitably trained to use fire extinguisher if possible. Abandon boat if life is threatened. No smoking on boats. Boats to be maintained. Fuel spillages cleaned up. Spare fuel to be in suitable containers.	Evacuate boat if fire cannot be controlled. Divers on RIBS to always wear zipped drysuits
Boat propeller / boat strike	Serious injury / death	medium	Cox's to be properly trained. Boat to be in neutral when collecting divers or dropping them off. Divers to be very aware of propeller strike hazard. Divers to identify their ascent with DSMB / SMB. Boat Handlers to be aware of their divers position	First aid and then phone ambulance / take to hospital immediately.
Vulnerable or young people additional risk of any of the above risks	Serious injury	medium	Extra measures to be taken such as safety divers, one to one instruction, assistance with heavy equipment, checking individual can safely carry out the dive within their physical limitations, full team brief from a Welfare Officer of extra hazards before the event.	Assess incident and react as required above
Bites or stings from creatures	Minor to serious / death	low	Take care when placing fingers near holes in wrecks (eels) Avoid stinging creatures such as jellyfish and be aware of long reaching stinging tentacles. Read up on types of animal/plant to understand possible hazards in the area you are diving. Avoid feeding large predatory fish as this may result in accidental bites. Avoid touching any wild life.	General first aid measures. Evacuate to hospital if needed.

