

Generic Shore Diving Risk Assessment

This document should be read by all divers taking part in shore dives organised by Totnes Sub-aqua Club, and will be made available to all club members via an annual distribution and on the club website.

It is the Dive Manager's responsibility to carry out a risk review prior to every dive, based on this generic risk assessment, plus consideration of prevailing conditions. 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 dive plan 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 dive.

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 TSAC 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 Dive Manager/Instructor shall brief the diver/trainee on the risks associated with the dive.

As part of the risk control measures the Dive Manager shall ensure that there is an oxygen kit and first aid kit available on every dive and that members are familiar with the use of the oxygen kit (a list of oxygen administrators is available from Diving Officer or from the link on the weekly "shout" email).

Anyone managing a branch dive must obtain the Diving Officer's consent to the planned dive. On completion, the Diving Officer shall be advised of the safe return of all divers, or of any accidents or incidents, at the earliest opportunity.

A detailed log sheet/slate will be kept during diving operations.



All divers must have completed a Recreation Medical Declaration Form and, where appropriate, have a Recreational Medical Certificate issued by a UKDMC Medical Referee.

All divers shall carry an alternative (gas) source, i.e. Octopus, Air II, pony or twin-set.

Divers to use SMB/DSMB as appropriate, and as required by any locally applicable regulations for the dive site.

Divers should ensure that their equipment is properly maintained and functional.

Divers to carry appropriate surface detection aids and a knife/tool for cutting.

The Dive Manager shall include diver separation procedures in the dive briefing as appropriate.

All Oxygen kits contain an Incident Procedure Sheet which should be completed to accompany a diver requiring evacuation by the emergency services.

| Hazard: | Risk of: | Risk Evaluation: | Controls: | Immediate measures to deal with consequences if risk does occur: |
|-------------------|---------------------------------------|------------------|---|---|
| Currents | Diver separation underwater | High | Dive Manager to use tide tables where appropriate and brief divers on tidal information. Ensure diver separation procedures are included in briefing and divers to consider use of a buddy line. Contact to be maintained throughout dive. If not diving with SMB, use DSMB for ascent. | Divers to abort dive and return to surface (subject to decompression requirements) |
| Currents | Diver(s) swept away from marked site. | High | Dive Manager to use tide tables where appropriate and brief divers on tidal information. Have contingency exit points available. All divers to carry surface detection aids such as DSMB, torch, strobe, EPIRB, flag, flares, whistle, etc, particularly DSMBs. | Divers to use SMB or DSMB for ascent. Divers to use surface detection aids to attract assistance. |
| 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. | Divers to abort dive and return to surface. |

| Hazard: | Risk of: | Risk Evaluation: | Controls: | Immediate measures to deal with consequences if risk does occur: |
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| | | | Equipment to be well maintained and regularly serviced. | Assistance from buddy as required. |
| Nitrogen narcosis | Injury to diver | High | Divers should agree a dive plan with the Dive Manager before the dive. Divers should build-up depth experience progressively. Divers to carry-out progressive work-up dives if going beyond their recent diving experience. Experience to be gained in company of Instructor/diver of greater experience at that depth. | Assistance from Instructor/buddy. |
| Reduced underwater visibility | Diver separation underwater | High | Ensure diver separation procedures are included in briefing and divers to consider use of a buddy line. Divers to be prepared to abort dive if necessary. All divers to carry detection aids such as torch or strobe. If not diving with SMB, use DSMB for ascent. NOTE: Divers should dive in buddy pairs if at all possible. Groups of three should consist of experienced divers who are self-reliant. If training, the normal student-to-instructor ratio of 2 students to 1 instructor should be reduced to 1 to 1 if possible, except in the case where the 'students' are experienced divers involved in supplementary training. | Divers to abort dive and return to surface (subject to decompression requirements) |
| Running out of gas | Serious injury to diver/death | High | Dive Manager to record "gas in" and "gas out" on dive slate. Divers to plan gas requirements for their dive and ensure they have adequate gas for that dive. Divers to perform a buddy check before entering the water, including gas levels. Divers to agree a gas reserve at which they will leave the bottom and monitor their buddy's gas level during the dive. All divers should carry an | Diver to use own or buddy's AS. |

| Hazard: | Risk of: | Risk Evaluation: | Controls: | Immediate measures to deal with consequences if risk does occur: |
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| | | | alternative source (AS), i.e. Octopus, Air II, pony or twin-set. | |
| Uncontrolled ascent | Serious injury to diver/death | High | 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. Divers using drysuits to have been trained in their use. Dive Manager to ensure oxygen kit and administrator available. If training, Instructor to monitor student. Instructor/student ratios to be in accordance with BSAC recommendations. | Oxygen kit and trained O2 administrators on site. Diving monitored by shore cover able to provide/direct assistance. |
| Unfavourable weather | Lost diver/Injury to diver | High | Dive Manager to plan dive using latest weather forecast, and to have contingency dive site. Continuously monitor conditions prior to and during dive and abort dive if necessary. | Dive Manager to cancel diving or change to back-up site. |
| Cold water | Regulator freezing/freeflow – injury to diver | Medium | Divers to choose appropriate equipment for the environment. Equipment to be well maintained and regularly serviced. Divers should consider the use of environmentally sealed first stages if regularly diving in cold water. If possible keep cylinders out of cold until just before diving. Avoid breathing from regulators on surface prior to dive and do not take regulator out of mouth during dive. Avoid alternative source (AS) drills, except on specific training dives with appropriate back-up procedures in place. | Diver to abort dive if necessary. Use own or buddy's AS if catastrophic loss of gas. |
| Cold water and/or wind chill | 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 | First Aid to be administered. Dive Manager/boathandler (or other divers) to contact emergency |

| Hazard: | Risk of: | Risk Evaluation: | Controls: | Immediate measures to deal with consequences if risk does occur: |
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| | | | early signs of cold. Trainees to be briefed on appropriate divers' signals to indicate chill. | services, as required. Hospitalise, as required. |
| DCI (DCS and barotrauma) | Serious injury to diver/death | Medium | Divers should agree a dive plan with the Dive Manager before the dive. Divers should avoid aggressive dive profiles and ensure they have sufficient gas for the planned decompression schedule, including safety stops if "no decompression" diving. 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. Divers to remain well hydrated and avoid excessive exercise after diving. If diving on computers, divers to have a contingency plan for computer failure e.g. watch and dive tables. Dive Manager to ensure oxygen kit and administrator available. | Oxygen kit and trained O2 administrators on site. Dive Manager (or other divers) to contact emergency services, as required. Incident Procedure Sheet to be completed for emergency services to accompany diver. Casualty to be referred to recompression facility. |
| Deteriorating weather | Risk to boat and passengers | Medium | Dive Manager to plan dive using updated weather forecast, and to have contingency dive site. Continuously monitor conditions prior to and during dive and abort dive if necessary. | Dive Manager to cancel diving or change to back-up site. |
| Diver inattention due to task loading (e.g. photographers, scallopers, wreck divers) | Diver separation underwater, entanglement of isolated diver | Medium | Dive Manager to consider likely tasks when determining buddy pairs (e.g. in many cases it's best to avoid putting two photographers together). Ensure diver separation and recall procedures are included in briefing and divers to agree behaviour underwater, i.e. different roles to be played by buddies. Divers to be prepared to abort dive if necessary. All divers should carry cutting tool or knife, torch or strobe as | Divers to abort dive and return to surface (subject to decompression requirements) |

| Hazard: | Risk of: | Risk Evaluation: | Controls: | Immediate measures to deal with consequences if risk does occur: |
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| | | | appropriate. If not diving with SMB, use DSMB for ascent. NOTE: Divers should dive in buddy pairs if at all possible. | |
| Diver influenced by drugs or alcohol | Injury to diver | Medium | Dive Manager to stop anyone believed to be under the influence drugs or alcohol from diving. Diver to advise Dive Manager if concerned about dive fitness of buddy. | Dive Manager to stop affected person from diving. |
| Drowning | Serious injury/death of diver | Medium | All divers should carry an alternative source, i.e. Octopus, Air II, pony or twin-set. | First Aid to be administered. Dive Manager (or other divers) to contact emergency services, as required. Hospitalise. |
| Ear damage | Injury to diver | Medium | Trainees to receive specific instruction on ear clearing. Divers to avoid diving when suffering from a cold. | Assistance from Instructor/buddy. |
| Fishing line, nets, kelp, and other underwater obstructions | Panic, entrapment or entanglement, injury to diver, running out of air, serious injury to diver/death | Medium | Dive Manager to brief divers of any known underwater obstructions or if the site is known to be prone to collecting nets & fishing lines. Change sites or dive plan if necessary. Divers should aim to have their equipment streamlined and avoid dangling equipment as far as is possible. Divers must have diving tool/knife for cutting. | Assistance from buddy. |
| Heart attack | Death | Medium | Divers to complete medical declaration/referral to medical referee. | BLS to be instigated. Dive Manager (or other divers) to contact emergency services. Hospitalise. |

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| Missed decompression stops | DCI - Serious injury to diver/death | Medium | Divers should agree a dive plan with the Dive Manager before the dive. Divers should ensure they have sufficient gas for the planned dive. 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. Dive Manager to ensure oxygen kit and administrator available. | Oxygen kit and trained O2 administrators on site. Dive Manager (or other divers) to monitor diver(s) for signs of DCI. |
| New location | Unknown risks | Medium | Dive Manager to plan diving at site with knowledge from charts, dive guides and local knowledge (e.g. from local dive clubs/shops). Dives to new locations to be managed/overseen by an Advanced Diver. Diving Officer to approve all dive plans in advance. | Dive Manager to cancel diving or change to back-up site if new risks identified that cannot be addressed within dive plan. |
| Night | Lost diver on surface | Medium | Dive Manager to be aware of divers planned times and watch for divers arriving at the surface. Make sure a proper watch is kept at all times. All divers to carry surface detection aids such as torch, strobe, EPIRB, flares, etc. All divers to carry spare torch. | Divers to use surface detection aids to attract assistance, e.g. illuminate SMB with torch. |
| Debris at entry/exit site or otherwise unsuitable | Injury to diver | Low | Dive Manager to consider whether divers can enter/exit water safely. Dive Manager to check that entry and exit are possible at all states of the tide during the diving day. Divers should only enter water if easy to do in full kit and exit is possible. | Change sites or dive plan if necessary, or abort dive. Divers to change method of entry or abort dive. |
| Hot weather | Hyperthermia/sunburn | Low | Divers to take precautions against over-heating/sun. Divers to avoid dehydration. | First Aid to be administered. Dive Manager (or other divers) to contact |

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| | | | | emergency services, as required. Hospitalise, as required. |
| Injury from falling cylinders | Injury to diver/general public | Low | Divers to avoid leaving cylinders standing upright, particularly if unattended. Trainees taught to always lay heavy equipment down. | 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. |
| Boat traffic/other water users in dive site location, e.g. fishermen | Serious injury to diver/death | Low | Shore cover to monitor other surface traffic while divers are in water. No ascents to be carried out in open water without an SMB or DSMB unless in an emergency and unavoidable. Divers to look and listen for boat traffic during ascent. Dive Manager to have contingency dive site and to be prepared to cancel diving or change to back-up site if necessary. | First Aid to be administered. Dive Manager (or other divers) to contact emergency services, as required. Hospitalise, as required. |
| Sharp objects | Injury to diver | Low | Divers to avoid touching jagged/rusty edges of metal on wrecks unless wearing gloves. Dive knives to be kept in sheath unless in use. | First Aid to be administered. Dive Manager (or other divers) to contact emergency services, as required. Hospitalise, as required. |
| Trips, slips and falls | Injury to diver/damage to equipment | Low | Brief trainee/inexperienced divers on how to put on and take off scuba equipment and to be aware of and look out for possible obstacles while walking or moving in diving equipment. | Remove casualty from danger and administer first aid. Hospitalise, as required. |

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| | | | <p>Divers should exercise caution when carrying diving equipment. Divers not to put fins on feet until at or very near to water entry point - this must not involve divers being exposed to a risk of falling in without having fins on. In the case of cold weather, extreme caution should be exercised by all divers as there is a risk of icy walking surface.</p> | |
| <p>Coronavirus or other infections</p> | <p>Exposure to/transmission of virus leading to possible acute respiratory tract infection/hospitalisation/death.</p> | <p>Low</p> | <p>Anyone displaying symptoms of virus (high temperature, persistent cough, shortness of breath, loss of taste, sore throat, blocked or runny nose, etc) should NOT attend club activities/boatshed until they feel better and are not displaying any symptoms.</p> | |