

Type	Example of risk	Risk: Anything you think might affect the safe completion of the activity above	Mitigation action: What should be done to reduce or remove the risk?
COVID-19	Infection of self or others	Any activity in relation to diving and the close proximity of other individuals.	Ensure that the Government, BSAC and Sheffield Scuba guidelines are followed in order to minimise the risk of infection of yourself or others.
Driving to Site	Road traffic accident	Road traffic accident.	Driving only to be undertaken by suitably qualified individuals, observation of the law, as stated in the highway code, all dive gear to be securely stowed. If carrying cylinders onboard it is recommended but not mandatory to affix a warning sign on the rear of the vehicle stating "Compressed gas onboard".
Dive Site - Non Diving	Car Park / other vehicles	Equipment or people injured due to car park users while transferring equipment to / from cars in the car park.	Ensure vehicle(s) correctly parked, keep look out for other vehicles in the area especially when transferring equipment.
Dive Site - Non Diving	Carrying/lifting Equipment	Injuries due to poor lifting techniques and dropping equipment.	Training in manual handling and assistance from "Dive Buddy" or Instructor. Carry cylinders by side, rather than on shoulders.
Dive Site - Non Diving	Hot - Exhaustion	Divers could develop hyperthermia, become dehydrated.	Use sun screen when out of water, drink plenty of water, avoid sun if possible.
Dive Site - Non Diving	Slipping over	Slipping or falling on entry or exit (some entrance/exits have a few slips and trip hazards. please see instructors.)	Check site condition on arrival. Include in pre-dive brief and assist each other in / out. Do not walk forward in fins, side step as shown by instructors.
Diving	Access to water	Entry/exit might be dangerous or difficult due to it being busy or the surface uneven or slippery.	Check that entry and exit are possible at all times during the diving day. Only enter if easy in full equipment and exit is possible. Ensure experienced divers go first to check the entry route out.
Diving	Cliff/wall diving	Going deeper than planned/capable.	All divers to have adequate buoyancy control for dive, monitor their depth and to adhere to the Dive Plan in force.
Diving	Cold - Divers	Divers develop hypothermia.	Ensure divers wear suitable underwater suits. Water may be warm, but longer dives can yield cold divers. Wear protective clothing at the surface and during surface interval if required.
Diving	Cold - Equipment Failure	Regulators may free flow.	Ensure divers don't purge or breath from regs until just about to enter water. Make sure regs are up to date in service.
Diving	Contaminated Air / Passing MoD	Poisoning due to toxic effects of: Carbon monoxide Carbon Dioxide Contamination (oil, oxides of nitrogen, etc.)	Observation of maximum operating depth (MoD) of breathing gas, avoidance of and checking for contamination of breathing gas (buddy check), Buddy monitoring, Experience.
Diving	Decompression Illness	Divers develop DCI, mild or severe. Category includes: Gas embolism Interstitial emphysema Spontaneous pneumothorax	Dives planned and conducted in accordance with BSAC '88 Decompression Tables or a decompression computer. All divers equipped with depth gauges and watches and/or decompression computers. Observation of maximum ascent rates and ascent drills Qualified personnel to administer O2 First Aid and summon assistance from qualified personnel.
Diving	Depth	Divers diving deeper than their qualification level and experience.	Divers to be reminded what their limits are and dive plans agreed with dive manager.
Diving	Depth	Nitrogen Narcosis	Whilst undertaking deeper dives (deeper than 25m approximately) divers may be subject to Nitrogen Narcosis. Treat by ascending to a shallower depth. Monitor Buddy.
Diving	Diver separation	Divers could get separated from each other.	Divers to stay in visual contact, adhering to buddy groups, particularly as the visibility worsens. Wear buddy lines or hold SMB line where appropriate.
Diving	Diver Rescue	A diver may require to be rescued from the water due to an issue.	Ideally surface cover is monitoring dives, where not practical, each group will act independently and manage rescues. Ideally, the rescue should be undertaken by the most senior diver available to undertake it.
Diving	Drowning	Diver inhales water and drowns.	Training in dive planning and conduct, monitoring of air consumption, Buddy check, Buddy monitoring, experience, maintenance of basic level of fitness. Diving with a buddy aids a rescue. See <b>Diver Rescue</b> for further mitigation.
Diving	Ear damage	Damage to ears.	Trainees receive specific instruction in 'ear clearing'. Divers do not dive when suffering from a cold.
Diving	Equipment failure	Lack of gas supply, buoyancy adjustment.	Check equipment before dive and often during diving. AS or CBL to be effected as needed.
Diving	Equipment failure	Computer	Dive from spare computer, buddies computer, carry backup tables, ascend to 6m and do a safety stop as required.
Diving	Fast ascent / Uncontrolled Ascent	Serious injury to diver, e.g. bust lung or DCI.	Divers taught ascent and descents, adequate buoyancy control keep an eye on buoyancy throughout the dive, particularly on the ascent. All divers to be aware that they should never hold their breath. Ensure diver and their buddy understands their buoyancy controls.
Diving	Falling Cylinders	A cylinder may fall out of the BCD strap.	Students should ensure that the strap is tight and secure before lifting as shown by the instructors. Buddy check to help detect issues.
Diving	Mask Squeeze	Divers may fail to equalise mask on descent and may result in red mark on face.	Only mask which encloses both eyes and nose in the same airspace used. Trainees receive specific instruction in mask equalisation.
Diving	Running out of air	Running out of air as a result of excessive air consumption.	Constant checks throughout dive. All SCUBA sets fitted with cylinder pressure gauges. Monitoring by Instructor or dive buddy checks.
Diving	Training exercise	Trainee diver may not remember drill from pool.	Ensure trainee has had recent practice in pool. Instructor to brief and demonstrate skills before trainee to undertake.
Diving	Unsuitable entry /exit point	Divers may injure themselves on entry to / exit from the water.	Only enter water where safe. Check entry location is safe before divers enter water. Plan the exit, check it is safe to exit before entering the water.

## Notes:

The hazards detailed above are the major risks faced by SCUBA divers. Incidents caused by fatigue, equipment failure, etc lead to the listed risks. These incidents would be

- Dive within your limits
- Build your experience gradually
- Practice the basic skills until you are faultless, and then keep in practice
- Plan and equip yourself correctly for the dive
- Maintain constant vigilance whilst involved in diving activities and be ready to act quickly as soon as things start to go astray
- Ensure that equipment is fully and correctly serviced (both diving and boating)