

I **Essential diving skills**

These are the minimum essential skills for safe diving at all levels of qualification. Essential skills must be regularly practised so that a diver responds instinctively to an adverse situation.

Surface skills

- Snorkel comfortably in varying conditions
- Determine correct weight
- Correct utilisation of buoyancy compensator
- Regulator/snorkel exchanges on surface

Mask skills

- Breathe comfortably without a mask
- Clear mask comfortably with only one hand
- Remove and replace mask comfortably

Regulator skills

- Clear regulator by both blast and purge methods
- Recover regulator from behind body
- Exchange regulators
- Out-of-air drill (or low-air drill)
- Must have safety (octopus, alternate air source) regulator

Monitoring air consumption

- Conscientiously monitor your own and your buddy's air
- Set conservative low-air warning points
- Plan to be back on surface with minimum of 50 atmospheres (750 psi) in cylinder
- Choose cylinder of appropriate size
- Carry redundant air supplies for deep diving (greater than 30 metres or 100 ft)

Buoyancy control

ON SURFACE

- Ensure weighted for neutral buoyancy on surface
- Enter water positively buoyant (partially inflate buoyancy compensator)—except for surf entry (deflated)
- Ensure regulator is in mouth and equalise ears
- Deflate buoyancy compensator

DURING DESCENT

- Always maintain contact with rope/reference and buddy
- Continually equalise ears before pain is felt
- Continually add air to buoyancy compensator in small amounts to maintain control of descent
- Breathe out through nose to prevent mask squeeze
- Check depth gauge to avoid going too deep

AT DEPTH

- Adjust equipment (especially weight belt)
- Maintain neutral buoyancy using buoyancy compensator
- Continually monitor air supply
- Stay with buddy, must be within two metres (6 ft)

COMMENCING ASCENT

- Signal buddy
- Locate rope/reference and maintain contact
- Commence ascent with adequate reserve air (100–70 atm or 1500–1050 psi)

DURING ASCENT

- Maintain contact with rope/reference
- Watch depth gauge and do not ascend faster than maximum recommended ascent rate of ten to fifteen metres per minute (30–45 ft/min)
- Maintain neutral buoyancy by releasing small amounts of air from the buoyancy compensator and using fins
- Do safety stops—one minute at six metres (20 ft) and three minutes at three metres (10 ft)

ON SURFACE

- Inflate buoyancy compensator
- Exchange snorkel for regulator
- Signal OK to buddy

The Buddy System

The following is essential for correct operation of the buddy system, which will help prevent accidents:

- Help each other gear up
- Do thorough pre-dive safety checks
- Warn your buddy of any potential problems (eg sea sickness, anxiety, ears, etc)
- Familiarise yourself with your buddy's equipment—particularly buoyancy compensator operation and weight system release
- Check understanding of hand signals
- Be at your buddy's side at all times, must be within two metres (6 ft)
- Monitor the well being of your buddy
- Maintain the dive plan

In the event of an incident or accident, your buddy provides essential support such as:

- Assistance when entangled
- Alternate air supply
- Giving first aid
- Getting trained medical assistance