

Low Bubble Diving

Microbubbles in the bloodstream can lead to serious health problems. It is therefore advisable, particularly if you have a venous to arterial circulation shunt (i.e. a PFO), to reduce the number of bubbles in the blood.

By changing your diving behaviour with the following rules for Low Bubble Diving, you can help prevent larger bubbles from being formed and then stabilised.

Low Bubble Diving Rules

- plan your dives carefully and sensibly
- **don't do any yo-yo dives**
- any repeat dives should be shallower than the previous dive
- **lengthen your safety stop** (i.e. to 5–10 minutes) at depths of 3–5 metres
- **don't do any deco dives**, observe the no-decompression limit
- **reduce your ascent speed**, particularly in shallow water from 10 metres upwards, and ascend from the safety stop to the surface at 1 metre per minute
- **increase your surface intervals**
- do a **maximum of 2 dives** per day
- dive with **nitrox** using air tables
- **know your dive computer** and choose a **conservative personal safety setting**

avoid further risk factors:

- intense skin warming from the sun, showers or sauna after diving
- dehydration (pay attention to your water balance and drink plenty)
- getting cold
- smoking

avoid activities which would encourage a bubble transfer (via a PFO):

- exertion at the end of a dive, e.g. by swimming against the current, transporting equipment or strenuously exiting the water
- physical exertion during the first hours after the dive e.g. athletic sports, running, swimming etc.

Of course, following these rules is no guarantee for a safe dive. Decompression sickness can also occur well within the no-decompression period, but the risk is very low.

For specific groups of divers (e.g. professional divers and diving instructors) and in emergency situations, low bubble diving is not always possible. Unfortunately, a certain amount of residual risk cannot be excluded completely.

We generally recommend that every diver **undergo regular fitness to dive examinations by a medical expert**. Our doctors are also happy to advise you individually as to your fitness to dive and your diving behaviour.

