

Guideline children and diving (in concept)

Mattijn Buwalda, anaesthetist & diving medicine physician
Bram Querido, psychiatrist & medical examiner of divers
Rob van Hulst, professor diving and hyperbaric medicine

This guideline is not a standard that can be declared applicable in all circumstances. There may be reasons to deviate from the advice in this position in individual cases.

Introduction

No research is available about the influence of hyperbaric conditions on the child's physical and / or mental development. The guideline can therefore not be substantiated further than at the level of "expert opinion". For many years the age limit was set at 14 yr (preferably 16 yr). The board of The Dutch Society for Diving and Hyperbaric Medicine (DSDHM) is of the opinion that a revision of this old guideline was necessary. The reason for this is that there is no substantiation for an age limit of 14 yr. and more and more children dive and start diving at a younger age. Dive medical literature and dive statistics do not indicate that more accidents occur among diving children. A discrepancy has arisen between the old directive and daily practice. The following table summarizes the recommendations. Considerations and backgrounds can be found in a separate document.

Guideline children and diving DSDHM

Age and water temperature

The DSDHM recommends that children from 8 to 10 years only dive in a swimming pool. Children between the ages of 10 and 12 should not perform open water dives in the Netherlands. In tropical destinations, with a water temperature of around 25 °C, this may be possible with the necessary precautions.

Children from 12 years on can dive in open water, provided that the water temperature is not below 14 °C. Up to the age of 14 years children should refrain from high risk dives, such as long dives, cold water dives, deep dives and drift or tidal dives. The DSDHM recommends that children under the age of 14 should be supervised by at least two adult certified and experienced divers.

1. Diving gear

- The child must have a well-fitting diving suit.
- Avoid over loading
- It is recommended to wear a BCD with integrated lead.
- Provide for a suitable mouthpiece

2. Medical

- **ENT**
The dive medical examiner should pay extra attention to the Eustachian tube function. One should ask for previous glue ears, tympanic membrane surgery, frequent ear infections and an atopic constitution. Problems during air flight can point to tuba dysfunction
- **Lungs**
The DSDHM advises to preclude children from diving who have asthma or signs of bronchial hyper reactivity (with or without medication). Above the age of 14, adult guidelines apply.
- **Psychiatry**
ADHD is a relative contraindication for scuba diving.
- **Cognition**
Whether a child is cognitively suitable for diving is a consideration that must be made in joint consultation between parents, dive medical examiner and dive instructor.

3. How often diving medical examination

One first time examination (unless there are physical or mental changes that lead to new examination) and from the age of 18 in accordance with the DSDHM guideline for preventive diving medical examination (for adults). NB for the 8-10 year olds who only make pool dives, a self declaration by the parents or caretakes is sufficient

age	water	minimum water temperature	remarks
8 - 10	heated pool only	25 - 28°C	self declaration
10 - 12	tropical open waters	about 25°C	
12 - 14	Dutch open waters without currents or tides	14°C	no long, deep, tidal or current dives
> 14	like adults		
< 16			no decompression dives

For more information, background information and a literature overview, we refer to the document: "Children and Diving in the Netherlands", which will be available soon.