

Diving fatality

Safety Flash Published on 1 January 2001 Generated on 28 January 2026 IMCA SF 01/01

One of our Members has reported the following diving fatality that occurred to a contract diver employed by a non-member company.

What happened?

During a surface supplied diving operation at a depth of 8 metres, whilst carrying out hook up operations, a diving fatality occurred. One of the divers was sick, vomiting inside his face helmet and clogging up his mask air demand valve. He pulled the helmet off his head in a rush, undid his bail out bottle harness, unhooked his umbilical safety hook from his body harness but failed to free himself from his bail out bottle pressure gauge hose. He subsequently drowned.

Many divers have been sick inside their masks and have survived this dangerous situation by clearing their helmet using the 'free flow' system. This system provides a massive flow of air directly into the helmet, which assists breathing and helps flush out food debris from the mask. In this case the diver appears to have tried to open the bail out bottle air supply in mistake for the free flow air valve.

The diver's breathing rate before the accident was very fast and shallow, and could have led to a build up of CO₂ in his mask. CO₂ build up can cause headaches, dizziness, nausea, vomiting, unconsciousness and death.

Our Member's investigation revealed the following:

The post accident investigation revealed that the diver who had died had no offshore diving experience. The logbook presented for scrutiny prior to the diving operations commencing was new with no dive records; the old book was requested but never received. The diver's experience was apparently related to lobster fishing and gold digging in Rivers; this only came to light after the accident.

Key Lessons

The key lessons learned by the company involved were:

- The dangers involved in diving operations are continually present.
- Even with accepted standard procedures in place accidents can still occur, vigilance and the reinforcement of accepted procedures cannot be relaxed.
- If the diver had operated his free flow valve instead of his bail out bottle valve he would have, in all probability, cleared his mask and flushed out

the vomit from his air demand valve.

- A diver being sick in his mask is a situation to be avoided at all costs.
- The Diving Supervisor should monitor the divers breathing patterns. If a diver's breathing rate is continually rapid and shallow, it is a positive sign that all may not be well with the diver.
- If a diver is feeling ill, which might lead to him being sick, he should notify the Diving Supervisor, who should terminate the dive and bring the diver safely to the surface, in order to minimise the chance of the diver being sick underwater.
- All divers should be competent in the diving technique being employed. Divers should hold a diving qualification suitable for the work to be carried out, and diving experience should be demonstrated by logbook entries.

IMCA Safety Flashes summarise key safety matters and incidents, allowing lessons to be more easily learnt for the benefit of the entire offshore industry.

The effectiveness of the IMCA Safety Flash system depends on the industry sharing information and so avoiding repeat incidents. Incidents are classified according to IOGP's Life Saving Rules.

All information is anonymised or sanitised, as appropriate, and warnings for graphic content included where possible.

IMCA makes every effort to ensure both the accuracy and reliability of the information shared, but is not be liable for any guidance and/or recommendation and/or statement herein contained.

The information contained in this document does not fulfil or replace any individual's or Member's legal, regulatory or other duties or obligations in respect of their operations. Individuals and Members remain solely responsible for the safe, lawful and proper conduct of their operations.

Share your safety incidents with [IMCA online](#). Sign-up to receive Safety Flashes [straight to your email](#).