

## Guidance on Dealing with the Body of a Deceased Diver in Saturation

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The following guidance is to provide practical assistance to a saturation dive team and takes into account legal aspects, environmental factors and the health and welfare of divers remaining in the saturation chamber system.

In the event of a fatality in saturation, the relevant regulatory authority will need to be notified. In most countries this will involve contacting the police. For example, in Scotland, once death has occurred at a workplace it is a requirement to inform the Procurator Fiscal who becomes responsible for the body. This can be done by calling the police and making contact with the Fiscal's Officer. No action should be taken without approval from the Fiscal or police. In practice the police and Fiscal will notify the Forensic Pathologist for advice about management of the body.

Experienced forensic pathological advice is likely to be that the body should be removed from the saturation environment promptly.

At the time of death while in saturation the deceased's body will be saturated with inert gas (helium) at the depth of death. After death there is no blood circulation and hence no mechanism for removal of the excess gas associated with supersaturation during decompression as occurs in life. There is therefore no mechanism to prevent the formation of large amounts of gas within the tissues which may interfere with autopsy examination (apart from decompression at a very slow rate which would allow escape of gas by diffusion alone).

Slow decompression is not practical because of decomposition occurring as time progresses. Decomposition will be accelerated as a result of the high ambient temperature in a heliox environment and the practical difficulties of achieving adequate cooling within one part of the chamber system.

Retention of a body of a close working colleague within the closed living area represents a significant psychological stress to other divers some of whom may be required to continue diving. Where death occurred as a result of accident or injury, some continued diving activity may be associated with investigation of the incident or recovery of equipment. There may also be problems associated with odour control.

The advice anticipated from the regulatory authority would be to move the body to an area of the chamber complex which can be isolated (suitable entry lock), place the body in a body bag with the application of large amounts of absorbent material adjacent to all body orifices, isolate the chamber, where possible reduce any heating to the chamber and then to decompress the body over a period of three to four hours.

Under no circumstances should the deceased's body be frozen, i.e. stored in a deep freeze facility.

Photographs of the deceased taken before decompression may be valuable in the subsequent forensic investigation. Any photographs taken should be held securely and passed to the regulatory authority at the earliest opportunity.