The Diving Medical Advisory Committee

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DMAC Statement on Health Surveillance of Commercial Divers

April 2008

Personnel working in the offshore diving industry are exposed to various hazards, including pressure exposure, toxic exposures, accidents, noise, vibration and illness in remote locations. Some of these result in well-established diseases, such as decompression illness, barotraumas, noise induced hearing loss (NIHL), dysbaric osteonecrosis, etc. It has also been demonstrated that divers are more likely to complain of symptoms, particularly musculo-skeletal pain and forgetfulness, and many demonstrate changes in lung function, although no definite disease entity had been found to explain these.

These data justify health surveillance as a risk control measure within this population. Some of these diseases have effective surveillance methods established, e.g. audiometry for NIHL. For others, methods are available but considered to carry an inappropriate risk, e.g. radiological screening for dysbaric osteonecrosis. For symptoms without a defined disease entity, questionnaire methods using techniques which can weight the importance of symptoms are appropriate.

The most critical step is to gather exposure data for individual divers covering pressure exposure, toxic chemical exposure, noise, accidents, and other incidents to assist in determining whether detected health effects are related to specific exposures.

In principle, it should be possible to establish a health surveillance programme using a combination of audiometry, lung function measurement and questionnaire methods.

Significant logistical difficulties exist, given that health status is critical for divers' employment and because many divers are self-employed (or on short term contract) rather than being salaried employees and because it is not possible to make health surveillance mandatory. Hence it should be anticipated that divers may be reluctant to release any data indicating a health problem, particularly if that data may be accessible by their potential employers, or affect their annual medical fitness certification exercise. Furthermore, the specification of statutory annual medical examination includes some aspects of health surveillance.

In order to overcome these problems it is recommended that a health surveillance programme should be:

- conducted completely separately from annual fitness assessments, such that results cannot influence fitness decisions;
- conducted by an independent body capable of examining the health data and comparing it with exposure data;
- voluntary;
- preceded by a public relations exercise designed to reassure divers that the programme does not represent a threat to their continued diving and demonstrate the potential benefits to the diver population;
- extended to cover non-diving personnel within the offshore diving industry;
- conducted in such a way that it does not itself induce health effects.

As divers may move between different employers during a career it would be greatly advantageous if an industry-wide format for the collection of exposure and health surveillance data be agreed.

Dysbaric osteonecrosis remains the most well established long term health effect of diving. While routine radiological screening is no longer considered appropriate the development of effective alternative methods such as MRI require further evaluation.

DMAC, the independent body comprising diving medical specialists from across Europe, seeks to provide advice about medical and certain safety aspects of commercial diving.

The views expressed in any guidance given are of a general nature and are volunteered without recourse or responsibility upon the part of the Diving Medical Advisory Committee, its members or officers. Any person who considers that such opinions are relevant to his circumstances should immediately consult his own advisers.