

A FOUR YEAR SURVEY OF MORTALITY IN BRITISH DIVERS

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In July 1970 there were 250 divers on the National Divers Register which had been started by Mrs DF Dyer. As far as can be judged at that time all 250 were obtaining the whole or a substantial part of their income from commercial diving and were making or intending to make a career of diving. An attempt is now being made to trace what has happened to these men over the past four years in terms of death and retirement in order to determine the fatal accident rate of commercial divers. The fatal accident rate can be expressed in terms of deaths per 1000 man years of exposure and a comparison then made with other sectors of industry. It is assumed for the purposes of this study that a man is exposed to the hazards of diving as long as he is available for work and has not made a definite decision to retire from active diving, irrespective of the amount of diving he was doing over the four year period.

The period covered by the study was from July 1970 to July 1974 inclusive, a period of four years one month or 1021 man years of exposure. Due to the difficulty of determining when a diver retires from active diving it was decided to assume that all 250 were exposed the whole time although it is known that 63 are not now diving. A further 43 men have not been traced and are also assumed to still be diving. Some information has been obtained on the rest of the group either by answers to questionnaires or word of mouth. As many of the fatal accidents reported to us were by word of mouth it was decided that a fatal accident would only be counted as confirmed if there were supporting newspaper reports, confirmation from the firm the man was working for, or from relatives or from research workers who are keeping medical and accident records of divers. Verbal or written reports of accidents from colleagues for which a confirmatory source has not been found to date are counted as "unconfirmed accidents".

To aid in the task of matching divers to prospective employers the register was divided into a group of 100 widely experienced divers who were prepared to travel overseas and a group of 150 who were more specialised in their underwater skills.

The results of the study to date are given in Table 1 and it must be emphasised that these figures are only provisional until all 250 men have been traced.

**TABLE 1**

**FATAL ACCIDENTS AMONG 250 DIVERS**

	<b>Group 1 (100)</b>	<b>Group 2 (150)</b>
Deaths in the UK	5 (confirmed)	7 (confirmed)
Deaths outside the UK	3 (unconfirmed)	1 (unconfirmed)

The distribution of the UK deaths was 7 in association with oil and gas industry in the North Sea, 1 crawfishing, 1 inland, 1 it is believed in a harbour or estuary and 2 in association with salvage and inspection.

Expressing the results in terms of 1000 man years of exposure gives a risk rate for

the UK of 11.7. If the overseas deaths are included this rate could be 15.6.

The relationship these figures bear to other industries is illustrated in Table 2.

**TABLE 2**  
**Fatal Accident Rate per 1000 man years of exposure (UK)**

Manufacturing	0.04	-	0.05
Coal Mining	0.3	-	0.4
Deep-Sea Trawling	2.0	-	4.0
Deep-Sea Trawling 1968	9.0		
Commercial diving	11.7	-	15.6 (?)

These figures illustrate a number of important aspects of the hazardous nature of diving:

1. The minimal confirmed fatal accident rate is higher than that of deep-sea trawler fishing in 1968 when the loss of 3 ships pushed the rate up to 9 and resulted in a full Governmental enquiry into trawler safety.
2. Unconfirmed deaths indicate that the true rate may prove even higher.
3. Commercial divers are at risk and are losing their lives in a wide range of diving activities in the UK and are very much at risk when working overseas.
4. Safety legislation that deals with a restricted aspect of commercial diving is of limited value to the profession as a whole or to individual divers who move between different types of work, eg. North Sea, reservoirs, harbours.
5. As the number of man hours spent by the group in the North Sea or other areas is not available the figures do not indicate that the North Sea is any more dangerous than any other areas of diving activity.

In summary it can be said that commercial diving is an extremely hazardous profession. Comprehensive legislation at both the National and International level is required if the fatal accident rate is to be reduced to a level comparable to that of other dangerous industries. Legislation covering one particular type of diving, such as offshore installations, will have a limited impact on the hazardous nature of the profession.

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#### UNSUITABLE SPORTS

The Education Gazette lists most sports as suitable for schools. Predictably, it does not approve of boxing, karate, tae-kwong-do, rifle shooting, clay pigeon shooting, spearfishing and flying. But just when you are thinking the list shows admirable concern for physical safety you come across another of the forbidden sports - contract bridge.

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