



Further investigation of possible musculoskeletal and cognitive deficit due to welding in divers identified in the ELTHI diving study

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Further investigation of possible musculoskeletal and cognitive deficit due to welding in divers identified in the ELTHI diving study

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A questionnaire survey was conducted to assess the health of divers and welders. The aim of the study was to determine if the health impact of a career in diving and welding was greater than welding alone. The response rate was 48%, with 182 diver welders, 108 non-diver welders and 252 non-diver non-welders completing the questionnaire. Complaints of cognitive and musculoskeletal symptoms were more common in diver welders than non-diver welders, and non-diver non-welders. In spite of this observation there was no convincing correlation between symptom complaint and welding exposure or diving experience. Welding fume exposure was significantly higher in non-divers than divers. Sixty percent of divers had welded at pressure, but the prevalence of symptom complaints in these divers did not differ from divers who had not welded at pressure. Further analysis of the ELTHI Diving study showed that among divers other factors, such as diving accidents and chemical exposures (e.g. contaminated breathing gas, petrochemicals and hydrogen sulphide), were associated with reported symptoms. Welding remained a significant predictor of cognitive but not musculoskeletal complaint after adjusting for diving experience, diving accidents, chemical exposure and lifestyle factors. In summary, these studies suggest that welders who dive have an increased the risk of cognitive complaint which is not observed in absence of diving. The cause of this remains unclear.

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The following questions are about minor mistakes which everyone makes from time to time, but some of which happen more often than others. We want to know how often these things have happened to you in the last 6 months. **Please circle the appropriate number.**

	<i>Very often</i>	<i>Quite often</i>	<i>Occasionally</i>	<i>Very rarely</i>	<i>Never</i>
Do you read something and find you haven't been thinking about it and must read it again?	4	3	2	1	0
Do you find you forget why you went from one part of the house to the other?	4	3	2	1	0
Do you fail to notice signposts on the road?	4	3	2	1	0
Do you find you confuse right and left when giving directions?	4	3	2	1	0
Do you bump into people?	4	3	2	1	0
Do you find you forget whether you've turned off a light or a fire or locked the door?	4	3	2	1	0
Do you fail to listen to people's names when you are meeting them?	4	3	2	1	0
Do you say something and realise afterwards that it might be taken as insulting?	4	3	2	1	0
Do you fail to hear people speaking to you when you are doing something else?	4	3	2	1	0
Do you lose your temper and regret it?	4	3	2	1	0
Do you leave important letters unanswered for days?	4	3	2	1	0
Do you find you forget which way to turn on a road you know well but rarely use?	4	3	2	1	0
Do you fail to see what you want in a supermarket (although it's there)?	4	3	2	1	0
Do you find yourself suddenly wondering whether you've used a word correctly?	4	3	2	1	0
Do you have trouble making up your mind?	4	3	2	1	0
Do you find you forget appointments?	4	3	2	1	0
Do you forget where you have put something like a newspaper or a book?	4	3	2	1	0
Do you find you accidentally throw away the thing you want and keep what you meant to throw away – as in the example of throwing away the matchbox and putting the used match in your pocket?	4	3	2	1	0
Do you daydream when you ought to be listening to something?	4	3	2	1	0
Do you find you forget people's names?	4	3	2	1	0
Do you start doing one thing at home and get distracted into doing something else (unintentionally)?	4	3	2	1	0
Do you find you can't quite remember something although it's 'on the tip of your tongue'?	4	3	2	1	0
Do you find you forget what you came to the shops to buy?	4	3	2	1	0
Do you drop things?	4	3	2	1	0
Do you find you can't think of anything to say?	4	3	2	1	0

