

Letter to the Editor

Australian scuba diving fatalities and decompression sickness: erratum and further analysis

Dear Editor,

I am writing to clarify some points made in my recent article on Australian scuba diving fatalities and decompression sickness in *Diving and Hyperbaric Medicine*.¹ First, I wish to point out a publishing error in Table 4. The rate for DAN America Members was 11–18 deaths per 100,000 Members and not per 100,000 dives as shown in Table 4. A corrected version of these data is shown in Table 1.

When assessing the risk of death of divers in Australia, I used the combined results of two different survey modes, one for Australian residents and the other for overseas visitors, to yield a total number of dives for Australia. Although this was the only way I could see of trying to roughly estimate a general rate for Australia, I am aware, and should have stated in the Discussion, that this method can sometimes provide unreliable results due to the different methods of data collection. A more reliable result, albeit not a general rate, can be achieved by calculating the incident rate separately for residents and visitors rather than combining them. This would have given estimates of 0.7 deaths per 100,000 dives for residents (95% CI 0.3, 1.5) and 0.4 per 100,000 dives for visitors (95% CI 0.1, 1.2), rather than the combined 0.57 per 100,000 dives reported.

As pointed out to me by some colleagues at DAN America, given that some of the visitors may have dived elsewhere during the period and died in a dive accident outside Australia, it would have been more appropriate, when reporting a per person rate, not to combine visitors with Australian divers

and to use deaths per visitor rather than deaths per diver for the international data. The same observation applies to the data previously reported from Stoney Cove, where the authors reported a rate per diver rather than a rate per visitor.² In this case, the estimates would better have been reported as 8.5 per 100,000 resident divers (95% CI 4.2, 17.5) and 1.5 per 100,000 visitors (95% CI 0.5, 4.3).

Where I separately estimated the individual fatality rates for Queensland and Victoria based on surveys in those States, I should have pointed out in the Discussion that inaccuracies can be introduced as different methods were used to determine the denominators. To better compare the relative rates between places, it is useful to view the 95% confidence intervals as shown in Table 1. As can be seen, when one considers the potential variation in these rates, there is no discernable difference.

I am grateful to my colleagues at DAN America, Petar Denoble and Richard Vann, for their input.

References

- 1 Lippmann J. Review of scuba diving fatalities and decompression illness in Australia. *Diving and Hyperbaric Medicine*. 2008;38:71-8.
- 2 Hart AJ, White SA, Conboy PJ, Bodiwala G, Quinton D. Open water scuba diving at Leicester: five years' experience. *J Accid Emerg Med* 1999;16:198-200.

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Key words

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Table 1
Global risk estimates for scuba diving fatalities

Group analysed	Deaths per 100,000 dives	95% CI	Deaths per 100,000 divers or visitors	95% CI
Australian residents	0.7	0.3, 1.5	8.5	4.2, 17.5
Australian visitors	0.4	0.1, 1.2	1.5	0.5, 4.3
DAN America members	–	–	11–18	–
UK divers	0.8	0.5, 1.3	–	–
Okinawa divers	1.3	0.3, 7.2	–	–
Stoney Cove visitors	–	–	2.9	1.4, 6.0

Editor's note:

We apologise to Mr Lippmann for the incorrect representation of some of the data in Table 4 of his paper.

Erratum

The following statement was missing from the bottom of Table 1 of the Diving accident guidelines of the German Society for Diving and Hyperbaric Medicine: summary version (*Diving and Hyperbaric Medicine*. 2008;38:151.):

* These symptoms can also be indicative of DCS type II or AGE