Letter to the Editor

The future of Project Stickybeak

Dear Editor,

It is with some frustration that I read Douglas Walker’s letter in the Journal about the future of Project Stickybeak and his apparent lack of success in finding a ‘successor’.1

I want to make it absolutely clear, as I have attempted to do so with Douglas on many occasions, that DAN Asia-Pacific fully intends to collect and report on dive fatalities as an ongoing project. We have been gearing up to this and, in fact, have relatively recently advertised a part-time research position incorporating this role, among others. It is our intention to publish reports from 2003 onwards.

We intend to work either with or without Douglas to expand dive fatality data collection and reporting throughout the Asia-Pacific. Douglas should feel comfortable that his great legacy in this important area will be continued and expanded.

Reference


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Key words
Letters (to the Editor), diving accidents, diving deaths, research

Editor’s comment: It is vital that DAN Asia-Pacific ensures there is active medical supervision and participation in the review process by an experienced diving physician.

Book reviews

Report on decompression illness, diving fatalities and Project Dive Exploration

DAN’s annual review of recreational scuba diving injuries and fatalities, 2004 and 2005 editions (based on 2002 and 2003 data)

150 and 140 pages respectively, soft cover
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The 2003 edition of this publication was reviewed previously.1,2 The annual review of DAN data on recreational scuba injuries and fatalities includes data from Project Dive Exploration (PDE). It collects prospective and accurate data on diving habits from selected populations of divers. The 2004 and 2005 editions follow identical formats except the 2004 edition includes a chapter on five-year trends (1998–2002) in diving activity for PDE, injuries and fatalities compared with 1987 to 1997. This review briefly summarises these trend data and some of the interesting features of the annual reviews.

PDE data for 1998 to 2002 show no trends for age of divers, sex, years since training, days in dive series or dives per day. Average maximum depth was 26 to 30 metres’ sea water (msw) without trend, and women had a mean of 1.5 m less than men. Nitrox diving increased during the period. Reported buoyancy problems decreased during the period while the incidence of rapid and out-of-air ascents was 10 times higher in injured divers.

Dive injuries in the same period decreased in the USA but increased in Central America and the Caribbean. The mean age of injured divers increased from 37 to 39 years. This follows an increase between 1987 and 1997 from 33 to 37. Injured divers over 50 increased from 7% to 15%. This may indicate an ageing diving population despite the lack of such a trend in the PDE data. The number of injured divers using computers increased from 20% in 1987 to 60% in 1998 and 70% in 2002. In spite of this, very few depth-time profiles were available from the computers. The median days of diving and the number of dives in a dive series before injury increased during the period. Women made fewer...
dives over more days than men prior to injury. Mean depth of injury increased by 3 msw from the previous period and men were injured 3 msw deeper than women on average. The percentage of injured divers using nitrox increased from 6% to 12% during the period, reflecting the increase in nitrox diving.

The delay to recompression remained fairly constant at a median of one day although the mean varied widely indicating some very long delays. Median recompression treatments increased from one to two and mean from two to three during the period, although overall they were similar to the previous period. Complete relief of symptoms at discharge increased to 70% after showing a gradual increase from 50% in 1989, suggesting the efficacy of recompression therapy may have improved.

The publications review 89 diving fatalities in each of 2002 and 2003. This is not a complete record of US recreational diving deaths but represents a large recent series and thus is of interest. The cause of death in the majority was given as drowning. The DAN data allow comparison of different diver populations, making it possible to draw some fascinating inferences from the data.

There were no teenage fatalities in 2002 and only one 18-year-old in 2003, which is fewer than previous years. The median age continues to be in the mid-40s with males a little older than females and divers who died five to six years older than injured divers or PDE divers. Less than a quarter were of normal body weight compared with over half of the other groups. This information may reinforce the need for medical review of overweight divers, especially those aged over 40. One third had been certified for over 10 years and half were doing their first dive for over one year. However, divers who died had a lower average number of years since certification than injured divers or PDE divers, so experience may have some advantage even if age does not! Trainees and technical divers seemed to die more frequently than their representation in other diving populations. Of similar interest is the lower incidence of previous medical problems in fatalities, except for hypertension and heart disease which were higher. Fatalities had a mean maximum depth of 20 msw compared with injuries, 30 msw, and PDE, 27 msw. In this series, and not unexpectedly, running out of air, buoyancy problems and rapid ascent all appear to represent a significant risk of death, and rapid ascent a particular risk of injury.

The 2005 report includes a new chapter on breath-hold diving incidents. DAN has collected data on 145 fatal cases since 1994 and these data to 2004 are reported here. This is a useful addition to the report, reflecting the increase in deep freedingiving as a sport and in offshoots such as extreme blue-water spear fishing. Eighty-eight per cent were male with an average age of 38 years. The cause of death was usually drowning with contributing factors frequently not identified clearly. The most common factor was entanglement with kelp and lines. This is recognisable after the event unlike the lack of features post mortem of shallow water blackout or other medical causes. Thus, medical factors in diving deaths are frequently not identified. Four cases involved boat strikes and two shark attacks. Solo breath-hold diving featured in some fatalities and careful dedicated support is clearly important for more extreme dives. Alcohol featured in at least two cases. Much of this chapter is a discussion of the risks of breath-hold diving and the data are much less detailed.

The publication ends with case reports of dive injuries, deaths and breath-hold incidents. These add a personal element to the preceding dry data and although written in a medical, dispassionate style, resonate poignantly with anyone who enjoys diving and anecdotes.

References


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Key words
Book review, accidents, incidents, deaths, decompression illness, recreational diving, DAN – Divers Alert Network

Assessment of diving fitness for scuba divers and instructors

Peter Bennett, Frans Cronjé and Ernest Campbell

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From abdominal cramps to vomiting, this book provides advice in relatively simple, non-medical language to help divers understand the impact of medical conditions on diver safety. Part one sets the scene by explaining the important role that the instructor can play in evaluating diving fitness; part two highlights the responsibilities of the diver; and part three provides factual information on common and
important medical conditions and disorders that have an impact on diving.

The first part of the book helps instructors to consider physical, physiological and psychological factors in the risk-analysis assessment of divers in the context of the demands of the diving environment. The authors point out that nothing can replace the face-to-face discussions between a diver and a physician trained in diving medicine. However, they believe the book will empower the instructor to determine when input from a diving physician is mandatory, or strongly recommended. The book also advises the instructor on how to avoid pitfalls in diving fitness, how to sensibly screen prospective divers or dive students for medical problems, and what to do if a problem is discovered.

Part two conveys to the diver the message that ‘fitness’ for diving is not static and that health is an ever-changing, dynamic phenomenon. Importance is placed on maintaining lifelong health and fitness in an attempt to prevent the conditions associated with the ageing process. There is also a very useful section on ‘diving nuisances’, helping the diver to understand common problems such as ear problems, headaches and motion sickness, and giving practical advice on prevention and treatment, including suitable medication options.

Part three is divided into body systems and makes up the largest section of the book, with 125 pages covering the A to Z of common and important medical conditions and disorders with an impact on diving. Finally, there are nearly seventy scientific references in a good bibliography and a useful list of medical acronyms and abbreviations.

I have only two minor criticisms of the book. Firstly, the units used to express laboratory results, such as lipid levels, are given in mg\textsuperscript{-1}, which may not mean much to readers who live in countries where laboratory test results are expressed in mmol\textsuperscript{-1}. A simple equivalent in parenthesis would have been a useful addition to help non-American readers relate to what is a high or low value. Secondly, because the references are listed alphabetically, rather than cited throughout the main text or at the end of each chapter, it is less easy to identify relevant references for further reading on a particular topic of interest.

In summary, this book provides for divers and diving instructors a refreshing, balanced and factual explanation of the risks of diving with medical conditions. Only a few medical disorders are regarded as absolute contra-indications to diving. For most conditions the authors present a risk analysis and recognise that, ultimately, it will be the divers themselves who take responsibility for the decision to dive or not.

These authors are all well-respected authorities in diving medicine and they have to be congratulated on putting together a comprehensive reference book of medical fitness, in a language that non-medical people will understand. This 241-page hardback book is a must read for every instructor and should have a place in every dive operator’s reference library.

Lynn Taylor
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Key words
Book review, fitness to dive, medical conditions and problems, recreational divers, scuba diving

The poetry doctor

A fishy dilemma

They come regularly from outer space
Crash landing in a bubbling, frothing ball,
Seemingly lost and out of control,
Fins thrashing wildly to stabilise their long entry fall.

They hover, peering downwards through a never-blinking eye,
Groping at loose flaps of skin and banded warty waist
Till all seems settled when they quickly sink
Leaving an umbilical bubbling wake in their downward haste.

How ugly they are with their long gangly fins,
Bubbles belching from a knobbly beak.
Most are black and drab, bleak as funeral dress
Whilst some sport a vivid red or yellow streak.

How slow and clumsily they crash around
Stirring up the sediment and sand.
Some are photoluminescent and flash
For reasons difficult to understand.

They are so unadventurous and timid
Too scared to go into the dark or deep
Moving around in small shoals
Yet following a leader like sheep.

They are quickly bored and depart
Slowly surfacing, readying to fly
And return to their earthy world
Through the surging stargate sky.

Why do they keep coming?
What is the attracting mystique?
What are they thinking? What are they escaping?
What really do they seek?

John Parker
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