

**New Zealand Underwater Association
(NZUA)
Best Practice Guidelines for
Recreational Diving Health Review 2006**

These guidelines have been finalised following a period of consultation involving diving training agencies, dive retailers, dive safety organisations, dive clubs, and representatives from the diving medicine profession.

Dr Lynn Taylor
(NZUA President and Dive Safety & Education Coordinator)
and
Dr Simon Mitchell
(Medical Advisor to NZUA)

NEW ZEALAND
Underwater

New Zealand Underwater Association

1/40 Mt Eden Rd, Mt Eden, Auckland
PO Box 875, Auckland, New Zealand

Ph 64 9 623 3252 · Fax 64 9 623 3523

nzu@nzunderwater.org.nz · www.nzunderwater.org.nz

New Zealand Underwater Association (NZUA)

Best Practice Guidelines for Recreational Diving Health Review

Background:

In late 2004 and 2005, there was significant media attention surrounding a small number of fatal scuba diving accidents in divers with pre-existing medical conditions, diving in New Zealand waters. In response to the call for the dive industry to take action, New Zealand Underwater Association (NZUA) has written these guidelines for recreational divers health review.

NZUA's position:

NZUA remains strongly opposed to any significant alteration to the current medical surveillance system in New Zealand based on the following points:

1. New Zealand already has a more rigorous system of diver health assessment than virtually any other country in the world. This includes Queensland in Australia which is often cited as having an overtly draconian system.
2. Recreational diving mortality remains very low, even in countries where less rigorous systems of recreational diving medical surveillance are in place.
3. The contribution of medical conditions identified at autopsy to a diving accident is frequently uncertain, and this is almost certainly true of some of the recent New Zealand events. In other words, the contributions of concurrent medical conditions to diving accidents may easily be overestimated.
4. Calls for more stringent medical requirements (such as annual medicals) are inevitably based on the assumption that such medicals will detect most medical problems of significance to diving and exclude those affected divers from the diving population. This is almost certainly not true. Short diving medical reviews based mainly on history are notoriously insensitive to potentially important disease processes like sub-clinical coronary artery disease. Moreover, the generalised application of more sensitive but time consuming and expensive investigations could never be justified given the current level of diving morbidity and mortality that is attributable to these medical problems.

Notwithstanding these reservations, NZUA does recognise that there are two currently troublesome issues in regard to medical surveillance that do warrant some early attention.

First, there is the issue of overseas ("tourist") divers visiting New Zealand, many of whom may never have had any formal medical assessment for diving. We believe that these divers should be subject to assessment by questionnaire, leading to a medical examination in cases where a significant positive response was elicited.

This is the standard approach taken prior to diving courses and, in many overseas countries, prior to participation in diving charters, and it does not seem unreasonable to visiting divers. In response to requests from the dive industry, NZUA has written a health status screening questionnaire for qualified divers, a screening tool which can be used to indicate whether a medical review is advised.

Second, there is the issue of New Zealand divers who undergo a compulsory medical (a voluntary industry standard) prior to their initial course, but then may be subject to no other medical assessment for the rest of their diving careers. NZUA believes there is a need to educate divers in the need for medical review at any time there are significant health changes during their diving careers, and to strongly encourage a further routine diving medical review at an arbitrary threshold age of somewhere between the ages of 40 and 50 years.

Preamble:

It is NZUA policy that all recreational scuba divers:

1. Receive professional dive training from a recognised training agency.
2. Have a medical review on entry into the sport*.
3. Divers follow standard safe diving practice guidelines.

*In New Zealand it is common industry practice that all participants undergo a medical assessment of their fitness to dive, prior to starting a dive-training course. It is therefore assumed that any diver who presents with a diver certification issued in New Zealand will have undergone a medical assessment at that time.

Scope:

This guideline for best practice recreational divers health review applies to recreational divers diving in New Zealand waters (Three Kings to Stewart Island).

Recommendations for recreational divers who do not hold a New Zealand issued diver certification (eg: tourist divers) participating in dive trips operated by commercial dive operators:

1. The diver completes the NZUA "Qualified diver's health status screening questionnaire" prior to being accepted for diving. This will be available from the New Zealand Underwater Association website www.nzunderwater.org.nz early in 2006.
2. If the diver indicates negative responses to all of the questions or statements, they are able to dive in New Zealand with no additional documentation required in relation to their medical fitness to dive.
3. If the diver indicates a positive response to any of the questions or statements, they must obtain medical clearance to dive before they can participate in commercially operated dive charters in New Zealand. Alternatively, they must be able to provide proof that the issue(s) raised in the questionnaire have been previously reviewed, and that a medical clearance to dive has been given.

Recommendations for recreational divers who hold a New Zealand issued diver certification:

4. All divers have a medical review of their suitability for diving on entry to the sport.
5. In the absence of significant changes in the diver's health, periodic diving medical review is unnecessary. However, divers should be instructed to seek

diving medical review if there is any significant change in their health (including diagnosis of chronic medical conditions, serious illnesses, accidents or changes in psychological status).

6. If relevant health issues are identified at the initial or any subsequent diving medical assessments, periodic review may be instituted at the discretion of the diving doctor.
7. Although not compulsory, medical review is advised at the age of 40–50 years. There should be a low threshold for investigating exercise tolerance and the ECG response where the history suggests this may be necessary. Periodic review may be advised thereafter depending on the individual's circumstances.

Recommendations for recreational divers who hold a non-New Zealand issued diver certification and are resident in New Zealand:

This will affect only a small number of divers and it is suggested that unless they can provide documented evidence that a diving medical review took place prior to their overseas course, these divers have a New Zealand diving medical review and then follow points 5-7 above.

Additional comments:

- When viewed objectively, it can be seen that the vast majority of divers will be affected minimally by these recommendations. Indeed, the main changes to current practice will be that tourist divers will be asked to complete a short medical questionnaire on registering to dive with a commercial operator, and that New Zealand divers will be strongly encouraged to undergo a medical examination at a threshold age.
- These recommendations represent higher standards than that required by the international professional training organisations, such as PADI (Professional Association of Dive Instructors) and SSI (Scuba Schools International), who only require a medical assessment if a candidate has given a positive response to a self-completed medical statement and questionnaire.
- Where practicable, any diving medical review should be undertaken by a doctor with post-graduate training in diving medicine as conducted on medical examination courses endorsed by the South Pacific Underwater Medicine Society (SPUMS).