

DID YOU LIE ON YOUR MEDICAL QUESTIONNAIRE?

By Dr. David Sawatzky

A dive instructor with two years experience is near the end of an open water checkout dive with a pair of trainees who've successfully completed their drills. The depth is only 30 feet (10m) and the dive is leisurely when abruptly one student heads for the surface. He's not in any obvious distress or hurry but at the same time, not waiting for anyone. The instructor takes control of the other student and follows. At the surface he finds the first student unconscious, red foam in his mask.

He calls for help, pulls the student out of the water and checks his breathing. There isn't any. He starts CPR and gets someone to call 911. The ambulance arrives and takes the student to the nearest hospital where, a short while later, the instructor learns his student has died.

An investigation ensues. Police interview the instructor and take copies of his records. Of note, the student's medical questionnaire, completed before the course, indicates no medical problems. Also, his performance in the pool had not suggested any sign of trouble. Further investigation reveals the deceased was seen using an inhaler before his checkout dive and even some pool sessions. No one had thought this might be a problem so it went unreported. Medical history obtained from the family reveals that the deceased was asthmatic and used inhalers on a daily basis. The autopsy reveals gas in the circulation to the

brain and in the chambers of the heart.

The student died from atrial gas embolism as a result of his asthma and the question on everyone's mind is how could this have happened, how did the situation get out of hand? Well, it didn't. The story is fictitious but, sadly, it mirrors all too closely many real life situations.

Once upon a time . . .

Historically, all open water scuba students were required to be screened by a physician who would supply a written note to the instructor stating his or her patient was medically fit to dive. The inherent problem in this was that most physicians had no training in diving medicine and weren't qualified to adequately determine if a person was or was not medically fit to dive.

Some physicians realized this and refused to certify anyone as 'fit' to dive; others certified everyone. Many made serious basic mistakes due to lack of knowledge. My favourite is the common situation where the physician knew there was 'some sort of problem' with asthmatics and diving so they would write 'fit for scuba diving but limited to shallow depths only' or similar cautionary words. They did not know that pulmonary barotrauma is primarily a shallow depth problem and that asthmatics are, in fact, at greatest danger during shallow dives.

Many physicians charged a fee for this medical examination, appropriately so, since it is not covered by Canadian health care plans. However, because many physicians were ignorant in this area of medicine it was often difficult to actually get an appointment for the

required exam. One of my favourite cartoons shows an old, obese scuba instructor, clearly in poor physical condition, saying to his students: "If you fail your medical examination, get another physician". And that's just what happened in many cases; if you visited enough doctors sooner or later you'd find one willing to sign-off on your medical fitness to dive.

The questionnaire is born

Training agencies realised something had to be done and developed guidelines in conjunction with physicians who did have advanced training and knowledge of diving medicine. Students then could take these guidelines to their family doctors, who were better able to understand and identify medical problems dangerous to anyone wanting to pursue diving.

Other agencies worked with knowledgeable diving doctors to develop a medical questionnaire that would pre-screen applicants. The questionnaire was carefully designed to identify students with any medical condition that might be a problem when diving. Any questions marked in the affirmative meant the student needed to be cleared by a physician - hopefully trained in diving medicine - before commencement of any scuba training.

Economics soon forced all training agencies to adopt the questionnaire procedure because for most corners it was the path of least resistance: lowest cost and fewer hoops to jump through to become a certified diver. Getting a diving medical is a big hassle for most and as far as I'm aware, all training agencies now screen applicants with a medical questionnaire.

So how do we avoid situations as described at the beginning of this article? Well, it's natural for people to think they know best and, therefore, to lie in certain circumstances. Students often believe a positive response might exclude them from dive training. Some, if refused scuba training by one instructor, simply go to another and lie on the questionnaire. In light of this, it's imperative instructors clearly explain to their students that where scuba diving is concerned lying can lead to dying.

Diving fatalities as I described will lead to the instructor being sued. In their defense, it's critical an instructor produce a completed medical questionnaire and better still if he or she can show also that emphasis was placed on the importance of being honest in its completion.

Don't play doctor or lawyer

One problem in all this is the instructor who has a lot of experience and/or who thinks that he or she knows more diving medicine than they really do. Instructors occasionally discuss positive responses on a questionnaire with a student and decide, unilaterally, that it's okay for the student to scuba dive anyway. In this situation the instructor will have a very poor defense should anything happen to the student.

A related problem is when an instructor counsels a student to 'ignore' a potential problem simply by not marking anything on the questionnaire; the (flawed) thinking here being that if something happens to the student the instructor is 'protected' because the form had no positive answers.

And, as I said at the outset, the family physician can also be a problem if unfamiliar with diving medicine. This professional may be very familiar with a patient's medical history, but still

unqualified to make a correct determination regarding the safety of diving for the individual.

To their credit, most instructors learn which physician in their area is most knowledgeable about diving medicine and, should a student require a medical check-up for diving, will accept a 'clean bill of health' for scuba training only from that particular physician.

Some physicians with advanced training in diving medicine, especially those who don't dive themselves, are very conservative; any positive response on a questionnaire means the applicant is unfit for diving. To be fair, physicians do find themselves in an unenviable position. If they certify someone as medically fit to dive and the person has a problem while diving, the physician will be sued along with the instructor. Physicians are in the business of helping people so this is understandably stressful and a huge inconvenience considering lawsuits can take years to resolve. Knowing this, some become entrenched in the belief that avoiding all risky behaviour is the best way to avoid injury. Sadly, this also takes much of the enjoyment out of life, in my view, biased though it may be.

Finally, because of the built-in conflict of interest in scuba instruction, it is important for instructors to maintain a healthy level of objectivity determining suitable candidates. Unfit students mean 'lost' income; don't make the wrong decision because in the end it's always about the bottom line.

Recommendations

Given all of the above, how can we practically reduce the risk? I believe screening by way of a medical questionnaire is the best procedure provided that the questionnaire has been designed with the assistance of a diving medical specialist so that all possible medical problems are identified before a person begins scuba diving.

Instructors must be diligent and thorough in their screening process. Student applicants must be honest filling in the form; any positive response on a questionnaire requires a physician evaluation. As an instructor, I would insist that a physician of my choice perform the medical exam and I'd choose diving doctors knowledgeable and reasonable in their evaluations.

Because there aren't any diving doctors in many locales and because the medical questionnaire usually has some information for the applicant's physician, the instructor should help to bridge this gap. He or she can do so by giving his student contact information for a physician trained in diving medicine - the medical director of the nearest hyperbaric chamber, for example - that the student's doctor can consult if they have any questions. In so doing, everyone involved an help prevent unnecessary fatalities such as the one above.


A final word. If you did lie on your medical questionnaire prior to being certified or if you have developed a medical problem since then, do the sensible thing now and have a knowledgeable physician in diving medicine examine you before any further diving.

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