Are You Ready?

The motivation for most scuba diving neophytes varies. Some seek the adventure, others look to connect with marine life, and still others might want to break away from their 9-to-5 lifestyles and try something new in a cool setting.

Even if I'd like to think otherwise, the motivation that drives most individuals to learn the sport is probably not the desire to know the best diving safety procedures. It is likely in the back of their minds, however.

But if safety isn't a key motivator for taking up diving, when is it time to learn about it?

Retaining Information

We're often asked such questions because of the DAN courses we offer; all are geared toward diving safety. Classes like the DAN Oxygen First Aid for Scuba Diving Injuries, First Aid for Hazardous Marine Life Injuries and On-Site Neurological Assessment for Divers are not required topics for divers when they're learning how to equalize their ears or clear their masks; they're designed for use "after the fact", or following a diving injury.

Recreational scuba diving courses, regardless of the certifying organization, generally include important in-water safety skills development throughout the courses. Entry-level divers, for instance, learn how to handle out-of-air situations, equipment entanglement and leg cramps, among other things. In advanced courses, divers learn more detailed navigation and how to dive under different conditions, such as diving at night or at greater depths.

It's not until later courses such as rescue training that divers learn about searches for lost divers, how to deal with panicked divers and develop skills for emergency evacuations. Educators will tell you that breaking up training into small bits, or building blocks, promotes greater retention of information. This means the so-called "know-it-all", or all-inclusive, courses are things of the past. It's generally agreed now that diving neophytes should hone their techniques on skills critical to every dive they make, and then build slowly on this as they progress through continuing education courses.

So when is the optimum time for divers to begin diving safety training?

The Right Time for Diving Safety Training

Many educators and professional aligned with diving believe that rescue diver training is the most important level of education for every diver and that all divers should strive to attain this level of certification. This training shifts the focus from the individual diver and places it on others, teaching divers to be better buddies in and out of the water.

This would seem a natural time to incorporate other diving safety training – those "after the fact" of the dive injury DAN courses. Some divers have taken this traditional approach. But what about the divers who never make it to the rescue diver level? Do they simply avoid diving unless paired with a rescue diver? Or, should they just continue diving in hopes that they will never have any problems?

Of course, neither is the right answer: divers need to be aware of their limits and choose their buddy, dive plan, locations and diving conditions accordingly. Being afraid isn't the answer, but neither is complacency. Avoid becoming careless about what you'd do in the event a dive emergency occurs. Diving is a safe activity but relying on the philosophy that "it just won't happen to me" may leave you with gaps in your preparedness.

All divers – yes, even entry-level divers – should have a solid grounding on the appropriate steps to take in a dive emergency. This should include basic CPR and first aid training, oxygen administration, the use of automated external defibrillators, handling hazardous marine life injuries and performing basic neurological assessments on injured divers.

But why stop with entry-level divers? Imagine this scenario.

After a long day of diving, you and your buddy pack up your gear, say good-bye and head your separate ways from the local quarry. You're looking forward to a big dinner and relaxing in your favorite chair. You hit the road after stopping by the first gas station you find to pick up a giant soda for the hour-long drive home. During dinner, your spouse notices that you seem to be moving slowly and that you're supporting your shoulder, like it's hurting. You explain that you are just tired from making three dives and hauling tanks to and from the dive site earlier in the day, adding that some time relaxing will surely help. Your spouse, who is not a diver, frowns, shrugs and continues to enjoy dinner.

Later that night as you toss and turn in bed, your spouse asks if you think you'll be able to settle in and fall asleep. You're just trying to get comfortable, you say, but not to worry: once you fall asleep you're sure that you'll be fine. Though you don't mention it, you notice that the dull ache in your shoulder from "lifting tanks" has not subsided, either.

You begin to wonder if you may have a dive injury, but unwilling to accept the possibility that something might be wrong, you roll over and spend the night trying to get some sleep, occasionally waking, and still looking for a comfortable position. The next morning you awake, still groggy from interrupted sleep, to the same pain in your shoulder. Now, some 18 hours after your last dive, you finally admit to your spouse (and to yourself) that there may be something wrong. Your spouse looks at you and says, "What do we do now?"

Identifying DCI

The annual DAN Report on Decompression Illness, Diving Fatalities and Project Dive Exploration indicates that symptoms of arterial gas embolism (AGE) are rapid, most often within the first few minutes of surfacing. There will be little doubt that immediate action is called for, assuming you've been trained to respond to these symptoms.

Symptoms of decompression sickness, however, are often delayed a little more – in some rare instances more than 48 hours after the last dive. They may be subtle or even go unnoticed. Also, because of the stigma that being "bent" carries, divers are often reluctant to admit that they may have a problem. But there's help in numbers. Experiencing – and discussing – an injury at the dive site, where other divers are available, may help an injured person to get more immediate recognition and subsequent care.

If divers are reticent about their symptoms, or if the discomfort begins later at home long after the dive, the situation becomes more problematic, especially if your spouse is not a diver. Your nondiving spouse or friend may not know what to look for or what care should be given; preferably that would be breathing 100 percent oxygen, contacting DAN and then seeking immediate medical care – even if you have received emergency oxygen.

Learning to dive may not be what your nondiving spouse is interested in, but he or she should learn about diving injuries and the proper care: if you experience a problem and no other divers are around to respond, your spouse will be better prepared to help you, even if that means simply encouraging you to call DAN. Recognizing these symptoms could decrease the time between recognition and seeking definitive care, something that may improve the outcome of an injury.

Defining The Terms

Decompression illness, or DCI, is a term used to describe illness that results from a reduction in the ambient pressure surrounding a body. A good example is what happens to your body when you're surfacing after a dive.

DCI encompasses two diseases, decompression sickness (DCS) and arterial gas embolism (AGE). DCS is thought to result from bubbles growing in tissues and causing local damage. Bubbles may also enter the venous circulation. AGE results from bubbles entering the lung circulation, travelling through the arteries and causing tissue damage.