
The Snorkeling Trap

How an unexpected snorkeling accident reveals possible gaps in how the diving industry approaches snorkeling excursions

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Is this diver snorkeling, skin diving, or free-diving?



Many dive operators give little thought to the hazards of snorkeling. After all, it's a reasonably low-risk activity that is usually conducted in relatively shallow water, with people who are not wearing scuba gear. Most snorkelers do not venture very far below the surface and rarely stay underwater for very long. Yet snorkeling accidents do occur, and sometimes they can be fatal.

A few years ago, a diver died during a snorkeling activity in the tropics and the case recently went to trial. What took place during this litigation has some serious implications for anyone who conducts snorkeling or skin diving operations.

What is snorkeling?

The diving industry has done a very good job of defining what constitutes a scuba dive for people in training. Most sport diving agencies agree that a "dive" must be 20 minutes spent underwater at a minimum depth of 20 feet. Anything that falls outside of those parameters is not considered a dive in the training arena.

However, when it comes to snorkeling or skin diving, things tend to get very vague. Within the scuba industry there is no consistent definition of what constitutes snorkeling, skin diving, free-diving, or breath-hold diving. While we all might think we know how these similar activities should be defined, because we have no consensus on these definitions, we have created a situation where what instructors and resort operators are doing is open to questioning when an accident occurs.

If you look at the standards for your training agency, chances are there are no documents that call out depths or time spent underwater to differentiate someone who swims on the surface with mask, fins, and snorkel from someone who dives down to a depth of 20 feet, 30 feet, 100 feet, or even deeper.

There are also no standards that call out how many snorkelers may be supervised by a dive-master, what safety equipment is required to run a snorkeling trip, or other important parameters. Whether we need these standards for organized snorkeling activities or not is something that only the industry can decide.

Some people define snorkeling as an activity where the participants use mask, fins, and snorkel, but do not dive below the surface. Some agencies allow snorkelers to dive beneath the surface, but

do not specify a maximum depth or time, beyond which the person would be considered to be engaged in "free-diving."

What exactly constitutes free-diving, skin diving, or breath-hold diving? Most professionals in our industry could readily distinguish between these activities, but it's difficult to arrive at a commonly accepted definition.

A tragic accident...

A few years ago, a vessel in the tropics conducted multi-day field trips for high school students to expose them to the marine environment and subjects like physical and biological oceanography. The crew of the vessel was composed of highly qualified lifeguards, all of whom had diving certification, with most having divemaster certification.

Prior to allowing any of the passengers to participate in any of the water activities, a briefing was conducted by one of the divemasters explaining the procedures to be followed during the trip. All of the passengers were specifically warned about the dangers of hyperventilation while snorkeling.

At the first stop for the trip, the crew swim tested all of the students and chaperones in the group. Each of the chaperones was a teacher from the school, and most had been aboard the vessel on previous trips for the school's students. Anyone who could not swim well, as determined by the crew, was identified by a yellow plastic wristband and required to wear a lifejacket whenever they participated in any activity in or on the water.

One of the first activities of the morning was a snorkeling excursion to a nearby large rock located in a broad cove. The vessel was located approximately an eighth of a mile away from several inflatables where the snorkeling was taking place. There were 36 chaperones and students in the water, being supervised by two experienced lifeguards. The snorkeling area was well defined by the rock on one side, the adjacent island, the extended cove, and the inflatables from which the passengers had disembarked. There were many types of fish and coral to be observed in the clear, warm water. The visibility was excellent.

Water depths surrounding the rock ranged from as shallow as 10 feet to a maximum of approximately 30 feet. However, on the seaward side of the inflatables, in the prohibited area, the bottom dropped away rapidly to depths in excess of 90 feet of seawater.

The crew members had warned the passengers not to hyperventilate, to observe the buddy system, and to follow the one up/one down rule if they went below the surface. The chaperones were also responsible for helping to supervise the students.

When the passengers left the inflatables, one of the chaperones chose not to participate in the



What parameters do we use to separate snorkeling from free-diving? At what depth does a dive become a free-dive? How long must a diver spend underwater on a dive before he becomes a free-diver?

snorkeling, and remained on the vessel. She remarked to one of her fellow chaperones that “she was not interested” in participating in the activity, even though this was part of her responsibility. This chaperone was one of the teachers for the school and was an experienced diver and small boat operator who had run similar snorkeling trips professionally herself.

Without warning the lifeguards, the previously non-participating chaperone went over the side into the prohibited area, wearing only a mask and snorkel, with no fins. Approximately 30 seconds after the passenger went over the side, the lifeguards saw bubbles breaking the surface from the direction the woman had gone. The bubbles were approximately 60 feet away from the inflatable and one of the guards entered the water to check on her.

Observing the chaperone to be apparently unconscious and sinking towards the bottom, the lifeguard attempted to free-dive down to the woman, but was unable to reach her. The lifeguard in the water maintained his position over the victim as she continued to sink. Meanwhile the lifeguard aboard the inflatable radioed a call for assistance to their vessel. The woman came to rest on the bottom, unconscious, at a depth of 91 feet.

Within six minutes, a crew from the vessel motored to the site in a rigid hull inflatable (RIB) with scuba-equipped divers, who swam to the bottom, and recovered the victim. CPR (with oxygen) was started as soon as the victim was aboard the RIB and she was back on the deck of the larger vessel within 10 minutes. Unfortunately, despite expert administration of CPR, the woman did not survive.

An autopsy revealed that the woman had a 50% occlusion of her coronary artery, although the autopsy did not list a heart attack as the cause of death. As is usual in so many cases like this, the coroner arrived at the conclusion, “She’s dead, she’s wet, she drowned.”



What is the proper ratio for a divemaster to snorkelers, or to free-divers?

The lawsuit

Following the accident the crew of the vessel invited the husband of the deceased woman to visit the boat to meet the crew so that he could talk to them about what happened. There was no hostility expressed by the woman’s husband. In addition, several months later, the owner of the vessel had a memorial plaque fabricated and took the husband and his children out to the site to witness the placing of the memorial marker on the bottom of the ocean at the dive site.

Despite the husband’s lack of animosity during his meetings with the crew, he retained a lawyer and filed a lawsuit against the vessel owner and his crew. During the course of discovery, experts for both the plaintiffs and the defendants visited the site, shot photographs and recorded video.

The plaintiff’s contentions were as follows:

- The chosen snorkeling site was inappropriate for the activity, despite the fact that this location is commonly used for this purpose by numerous operators. The site is mentioned in two guidebooks as an appropriate site for novice snorkelers.

- The crew had allowed the passengers to go free-diving, i.e., by the plaintiff's definition, to dive beneath the surface to depths in excess of 10-12 feet while holding one's breath.
- An inappropriate mixture of activities on the day of the accident, including swimming, snorkeling, and free-diving had been permitted by the crew of the vessel.
- There was inadequate supervision of the passengers. There should have been at least six lifeguards/divemasters supervising the activity (7/1 ratio).
- The lifeguards should have been on paddleboards rather than in the inflatables while they were watching over the snorkelers.
- Scuba gear should have been present in the inflatables used to conduct the excursion.
- Floats and lines should have been placed in the water by the crew to mark the boundaries of the area where snorkeling was allowed.
- The woman had passed out as a result of hyperventilation.
- According to the plaintiff's experts, the crew could not possibly have recovered the victim in the time frame written in the ship's log and testified to by the rescuers while under oath. The plaintiff's experts thought the rescue by itself would take in excess of 10 minutes.

These were just some of the claims made by the plaintiff, their attorney, and experts. There were many others.

It was unknown exactly how long the woman was submerged prior to the accident or to exactly what depth she descended. Both lifeguards were wearing watches so their estimates of her being underwater for 30 seconds prior to the event seem reasonable, since the lifeguards needed to adhere to a schedule so the passengers would be on time for the next activity. If their estimate was correct, then the likelihood that the woman experienced shallow water blackout is highly unlikely.

Knowing what depth the woman had descended to prior to her passing out was more problematic. The lifeguard who first saw her underwater after she had passed out and was sinking esti-

Most people would think that an inflatable is a perfectly appropriate platform to use for supervising snorkeling, but some experts have said it is not.



mated her depth at 25 feet, which would lead one to believe that she had passed out at a shallower depth.

Timed breath-hold dives by one of the defense's experts without fins to a depth of 30 feet took just over 30 seconds, which would lead one to believe that the victim probably did not descend to a depth any deeper than this. The expert's dives were straight down and back up since it was unknown how far horizontally the woman swam away from the inflatable. In addition, it would have taken time for the woman's bubbles to reach the surface, which would also have to be factored into any estimation of her maximum depth.

Surviving the trial

Although the defendant's insurance company had offered to settle the claim in an effort to avoid a costly trial, the plaintiff refused settlement and the case proceeded to trial. The trial went on for more than two weeks.

At the conclusion of the trial, the jurors found the corporation that employed the lifeguards/divemasters partially guilty of the wrongful death of the woman, and that the woman herself was partially responsible. The jurors determined that 85% of the fault lay with the woman, while 15% belonged to the corporation. The individual lifeguards/divemasters were not held to be negligent.

Implications for the diving industry

Although most of the training agencies, retailers, and tour operators in the diving business see themselves engaged in catering to the scuba industry, snorkeling and skin diving are important to our profession. Snorkeling is often the first step towards scuba certification, and is frequently used as a means to get people interested in diving. Although skin diving skills have been de-emphasized in many certification programs, many stores still employ an optional skin dive to provide a gradual transition to the open water environment for scuba divers in training.

As an industry, it's time we came up with some good definitions for what differentiates snorkeling from skin diving, what the proper snorkeler-to-divemaster ratios are for these activities, what constitutes proper supervision of these activities, and what (if any) rescue gear must be available on site. If we fail to do this, we can rest assured that we'll continue to come under fire from individuals who want to sue us for these types of accidents.

About the author

Steve Barsky is the president of Marine Marketing and Consulting, and has worked in the diving industry since 1965. He works as an expert witness in numerous diving accident cases, in addition to his work as a consultant and technical writer.

Steve has worked as a diving instructor, commercial diver, and professional underwater photographer. He has authored textbooks for Dive Rescue International, NAUI, Scuba Diving International, and Scuba Schools International. In addition, he has published books through Hammerhead Press - www.hammerheadpress.com.

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