

# Diving After Breast Cancer

"There was never a sea so blue or an ocean filled with so many things as my first dive after my diagnosis. I am now cancer-free, but one's perspective on things once taken for granted drastically changes." One of every three cancers diagnosed for women is breast cancer. According to [breastcancer.org](http://breastcancer.org), statistics show it is on the rise.

Every two minutes a woman in the United States is diagnosed with breast cancer. In 2005, it is estimated that about 212,000 new cases of invasive breast cancer will be diagnosed, along with 58,000 new cases of non-invasive breast cancer. And 40,000 women are expected to die from this disease.

Breast cancer incidence in women has increased from one in 20 in 1960 to one in eight today. In a previous issue of Alert Diver, we looked at breast cancer and issues of fitness to dive. Then in an anonymous survey, we asked women if they had been diagnosed with breast cancer; and if so, whether they had either received treatment or were undergoing treatment. We received 42 completed surveys from women who had received treatment, which ranged from lumpectomies to mastectomies and therapies may have included chemotherapy and radiation.

The women, ages 36 to 66, provided a wide-ranging and enlightening responses. We have pulled some meaningful quotes from the women surveyed. "When I was first diagnosed, I didn't know if I was going to live, let alone dive. Now my motto is 'Savor every moment!'" The encouraging responses we received from the survey gave us practical and supportive information about women and their decisions to return as quickly as possible to a sport that they love and depend on. Safe diving is the priority for these women, and they show us that a breast cancer survivor can continue to lead a normal life and safely enjoy simple pleasures after cancer.

"I find diving to be very relaxing and, psychologically, I know that as long as I can dive, I am well." Several concerns were addressed by some of the survey responses. One such concern is lymphedema\* and diving. Actually, 12 percent of the divers reported that diving actually helped reduce their lymphedema. However, one diver cautioned that lifting the heavy dive gear may make lymphedema worse. If extra care is needed, pressure garments can help with swelling. After a mastectomy and subsequent breast implants, buoyancy was also a reported issue. One diver recommended that making sure that gear fits properly will help if there are any differences in postsurgery buoyancy.

In one study, Dr. Richard Vann, Vice President of Research at DAN America, studied the inert gas uptake in breast implants, simulating in a laboratory setting the effect of various depth/time profiles on implants. As far as change in size or gas absorption, breast implants were not found to be a contraindication for diving. Survey participants mentioned the risk associated with the mental "fogginess" that can be experienced with chemotherapy medications. Of post-surgical signs, one of the safety-conscious respondents said this: "Beware of 'chemobrain' [loss of focus, mental confusion, loss of memory or decreased thinking clearly that some patients feel after chemotherapy]. Don't dive with problems in decision-making, memory, or following sequential directions."

Other respondents reminded us about the risks of cuts and scrapes that cause infections. Staying

physically fit, eating right and listening to your own body were also among the practical diving tips. "Ask DAN. The response was both helpful and reassuring." When we asked what recommendations about returning to diving their physicians had made, we were encouraged to hear that not one physician had recommended they stop diving. Typically physicians suggested that when the incisions from surgery had healed, and the diver felt strong enough, she could consider diving.

Several women reported their doctors had recommended they wait until they had completed all chemotherapy and radiation treatments before they resumed diving. Several women said they had not even asked their physicians. One diver reported she went diving within 10 days after her mastectomy, and another diver's physician cleared her to dive one week after surgery. The divers in our survey waited from 0 to 48 months before diving again. When asked if they had physical limitations now due to the cancer, 20 percent reported that they fatigue more easily now; 16 percent reported decreased arm movement due to the surgery; and 2 percent reported pain. Before returning to diving, 80 percent had begun exercise programs to increase their physical fitness.

Because scarring after surgery may decrease range of motion, physical therapy may be needed to get back into shape for diving. "The advice to use a physical therapist after release from surgery was one that my surgeons felt was not needed. I received that advice from DAN and followed it. The use of a physical therapist to improve the range of motion and strength in the affected arm is the best post-surgical decision that I have made, and will certainly enhance my diving future. Thanks, DAN!" Incisions need to heal before a return to diving; this reduces the risk of infection. In addition, some chemotherapy drugs may present additional risks that should be evaluated before diving again. Risks also include uncommon side effects of lung scarring and heart damage.

The cancer itself can sometimes spread to the lungs, and it could predispose to gas embolism. Thus, a regular evaluation in the context of diving safety by a physician is recommended. Not allowing cancer to dictate the future is important, but safe diving is a priority. We received incredible testimonies to diving and the empowerment that women feel when making decisions about their lives and the activities they love. This response about benefits of continued diving is that they enjoyed diving with family members and friends: "I experienced the enjoyment of the sport with my husband, who encouraged me throughout my treatment to be the best I could be."

Women said they do not allow breast cancer to have control of their lives; their diving proves that cancer does not dictate how they live their lives. And "living" is the key word. Diving can provide powerful physical and emotional healing and a spiritual connection. "I love the peace of mind and the open feeling when I dive. No phones, no one to talk to. It's natural. It's God's work, not touched." One diver succinctly put it: "Diving is mandatory for my psyche."

Thanks to the women who responded to the survey. We hope these comments, advice, and reflections can inspire many other women who face the same challenges.

\*swelling, especially in subcutaneous tissues. Most lymphedema in breast cancer survivors is seen in the arm, due to the obstruction or removal of lymphatic vessels or lymph nodes.