

The Surface Times

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Diving with Asthma

by David Crocker



My wife has asthma and has been diving for many years. Does this mean that people with asthma should be divers?

Asthmatic diving is a controversial issue. For years, any history of asthma has been considered a contra-indication for diving. That opinion is beginning to be amended. Many doctors who are divers now do not consider asthma to be an absolute contra-indication for scuba diving. Each asthmatic should be evaluated on an individual basis to determine whether or not their condition is acceptable to dive. The would-be diver's personal physician needs to consider the type and severity of asthma, the person's history of attacks, and what triggers their asthma when deciding whether to clear an individual for diving. Potential divers with a history of asthma must see a doctor, preferably one who dives, and undergo a routine lung evaluation before taking to water.

What is Asthma?

Asthma is an ailment that causes a person's airway to constrict in response to some stimulus. Individuals with asthma may experience an attack when exposed to allergens or cold, as a response to exercise, or when under intense stress.

Asthma is a widespread condition. Studies estimate that up to 7% of the U.S population has been diagnosed with asthma at some time in their lives. Some individuals have childhood onset and may grow out of it. Others have adult onset and have to live with it.

Can Asthma Be Dangerous When Diving?

In an asthma attack, a person's airway constricts. Imagine the airways leading to the lungs as pipes, the diameter of the pipe decreases during an attack resulting in air not moving efficiently in and out of the lungs. Thus, there is an increase in breathing resistance, or the amount of effort it takes to inhale and exhale.

The air that divers breathe is compressed making it denser than air on the surface causing increased breathing resistance for the diver. That is, It takes more effort to inhale and exhale. If breathing on the surface is like sucking air through a pipe, then breathing at depth is like sucking honey through a pipe. The deeper a diver goes, the denser, or thicker, the air he breathes is, and the more his breathing resistance increases. Add the increased breathing resistance underwater to the already increased breathing resistance during an asthma attack, and it is possible that a diver having an asthma attack underwater will not be able to get a sufficient amount to air.

As the diver ascends, the air expands in the lungs due to the lessening water pressure. This is not a problem for a non asthmatic diver since the expanding air is released out his airway as he exhales. If the diver is having a mild asthma attack, the lung air will not be able to discharge at a normal rate because of the compromised airway. The expand-

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Coco's Island

All I can say is, "You shoulda been there!"

Stay tuned for more photos and stories.



Creature Feature

Also from Coco's Island

The Bigscale Soldier is a member of the Squirrelfish family you know from the Caribbean, of course. They are common from Southern Baja to Ecuador. During the day they drift in cracks, crevices, small caves and under ledge overhangs. You may see them mixed with Panamic Soldierfish and Tinsel Soldierfish. They are 5-8 inches with a max of 12 inches.



However, the other fellow in this photo was new to me. The Giant Hawkfish is common from Peru north to Baja. They inhabit rocky, boulder and gravel strewn slopes and on ledges along walls. They lie motionlessly waiting for unsuspecting prey to pass near their large mouths. The spines of the dorsal fin are venomous and can cause a painful wound. They are also sometimes known as 'Hieroglyphic Hawkfish'. They are 10-16 inches long with a max of 21 inches.



Diving with Asthma

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ing air will be trapped in the lungs. Even a small amount of trapped expanding air can cause decompression illness or air gas embolism from ruptured lungs. This can be fatal.

Diving with exercise or stress induced asthma is more dangerous than normal exercise with asthma because of the logistics of diving. Underwater, divers can not immediately cease exercise or use asthma medication.

Is Asthma an Absolute Contra-indication for Diving?

No. Some people with asthma may be cleared for diving. This depends upon the type of asthma and an individual's history. A potential diver should consult with a physician, undergo routine lung health tests, and fully understand the risks of diving with asthma before making his final decision. In the case of my wife, her asthma is induced by allergies and she is not affected by stress or exercise. Another factor in favor of her diving is that her asthma attacks are rare due to her ability to stave off attacks with the use of medication and knowledge of the condition.

What Do Doctors Consider When Determining an Asthmatic's Fitness to Dive?

An individual's fitness to dive, the type of asthma, the rate of recurrence of attacks, medication, and personal history of asthma are taken into considerations when evaluating an individuals fitness to dive.

Asthma that is triggered by exercise, cold, or stress in an absolute contra-indication to diving. This type of asthma could be triggered by conditions encountered while diving.

Asthma that is triggered by allergens is usually not a contra-indication to diving, as it is unlikely that divers will encounter these allergens when diving. Divers taking medication to control their asthma are not necessarily banned from diving either. The key is whether or not a person's asthma is under control. Some medications that control asthma are approved for diving. A diving doctor will consider the kind of medication and how effective it is in preventing asthma attacks before allowing a person to dive.

Why Are Physical Tests Important in Evaluating Fitness to Dive With Asthma?

Physical tests are vital in determining the condition of an individual's lungs and therefore his fitness to dive. People who have had no or few recent asthma attacks may still be unfit to dive if their lungs are weak or in poor condition. Be wary of doctors who issue a blanket "no" or "yes" response without a physical evaluation.

What Physical Tests Do Doctors Use to Evaluate Fitness to Dive With Asthma?

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Congratulations Are In Order !



Mitch

Michael Harris is a new **Open Water Scuba Instructor!**

Reggie Clark is a new **Assistant Instructor!**

Starting in late September through October they worked long and hard to perfect demonstration skills, learn to make teaching presentations, and become so comfortable with physics that they can calculate the displacement of a cruise ship in their sleep. Like anybody cares, right!



Reggie

During the weekend of October 23 and 24, 2010, Mitch underwent a two day examination by PADI Instructor Examiner who was sent here to test instructor candidates from all over this area.

The result, these two gentlemen are due a handshake and a hearty congratulations.



Travel 2010 – 2011

Cozumel

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Diving provided by We B Divin' Cozumel includes snacks, drinks and lunch on the boat. Towel service, fresh water shower & gear stowage provided on board.

Truk

November 27 — December 04, 2011

\$3280 plus airfare, double occ
Est airfare DFW to Tkk is \$1800
(unless you have miles (-;)

1 night in a hotel in Chuk, est \$75



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Non-invasive and simple tests are used to evaluate the health of the lungs.

Spirometry: This test requires a person to breathe into a machine, which uses information gathered from the way a person breathes to evaluate his lung function. For example, a person may be asked to inhale completely and exhale as hard and as long as he can.

Peak Flow Test: This test can be conducted using a sophisticated spirometer or a simple peak flow meter. Results gained from a simple peak flow meter may be less reliable than the battery of variables usually tested by with spirometer.

Bronchial Agitation Test: This may or may not be a good test. Some doctors claim to have obtained false positives from this test. In a bronchial agitation test, saline water is aspirated into the lungs and then variables are tested to see how the lungs react.

Exercise Tests: Spirometry or Peak Flow Test may be used to evaluate a subject before and after exercise. This helps a doctor determine if the asthma is exercise-induced.

Post Bronchial Dilator Tests : A person's lungs may be evaluated after the use of an asthma controlling medication to see if the medication is effective. Many asthma medications are approved for diving if they are seen to effectively control asthma in an individual.

So, Should You Dive With Asthma?

It depends. The decision to dive with asthma should be made by you and your doctor after careful testing and consideration of the various factors affecting asthma and diving. But without a doctor's clearance, you cannot take classes.

SOURCE DOCUMENTATION:

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<http://scuba-doc.com/asthma.htm> "Scubadoc's Diving Medicine Online Asthma & Diving"

<http://www.diversalertnetwork.org/medical/articles/article.asp?articleid=22> Asthma & Diving

<http://ezinearticles.com/?Asthma-and-Scuba-Diving---Why-the-Confusion?&id=3408904> Asthma & Scuba Diving - Why the Confusion?



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The Surface Times

We B Divin' is your personal resource for scuba training (PADI), equipment sales, service, and travel.

We pride ourselves on individualized training, especially for people with water related anxieties. Our rental gear includes SeaQuest weight integrated BCD's (women's and men's), computers, and regulators for state of the art training and the ultimate in safety.

Remember, enjoyment and safety are enhanced by comfort and proper fit. We will personally fit you, whether your primary interest is diving or snorkeling.

We offer both group and individual travel opportunities. Both singles and couples are welcome. Singles may ask to room share or can choose the single supplement option. Everyone is welcome - divers, snorkelers, non-divers, shoppers, etc.

Think Outside the Bowl!

There is much to learn, many places to go and much to see.



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We're on the web!
www.we-b-divin.com

Divers Alert Network

DAN Travel Insurance

This is Dan's newest product. I am sure that I have not reviewed every Trip Cancellation and Interruption policy available out there on the market, but this one is very competitive in benefits as well as cost. Also, of course, when we use this

product we are supporting DAN which is always a plus.

Travel insurance is good for those who want to plan a trip but have pending concerns like the health of a loved one. It is very valuable when planning a BIG trip like Truk Lagoon. Many times trips like this must be planned far in the future

and we simply cannot know what life will put on our plate in the interim. So this type of insurance protects us from a total loss.

Check the details from our web site by clicking here

[DAN Dive Insurance](#)

Divers Alert Network

Membership

DAN is the only organization I am aware of that is actively pursuing medical dive research. They provide assistance to all divers (regardless of membership status) through 800 phone numbers and will accept collect calls from anywhere in the world. This alone is

worth our support with membership fees of \$35 per year. The included subscription to Alert Diver is just a bonus.

Dive Insurance

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medical coverage for a dive accident but extra transportation, extra accommodation, lost diving equipment and much more.

I cannot stress enough how valuable it is to have this coverage. Check the details from our web site by clicking here

[DAN Dive Insurance](#)