



National Association for Cave Diving
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NACD Safety Advisory

Cave Diving Guidelines Revisited

Recently the cave diving community has been affected by three deaths in two separate incidents. One was a member of the NACD Missouri Fauna Count Team. His death occurred in Mexico and those details are still being uncovered. The other two deaths occurred on Christmas Day at the Eagle's Nest cave system. A father and his son were testing out some new equipment there, though neither were certified cave divers. We are at a point in time where cave diving guidelines and procedures are well developed. Dive equipment is well manufactured and rarely causes problems. The fatalities discussed here apparently were related to unknown health conditions and lack of training. The NACD has an obligation to our sport to explore these incidents with the community in the hopes that we can influence our members and the others who explore caves to take a moment to pause and evaluate their own skills and conditioning before diving again.

For our Fauna Count team member, it does not seem that any of the guidelines for cave diving examined during accident analysis, were broken. He had the proper training and certifications for the dive he conducted. He had run a continuous guideline from the exit point. He also used appropriate gases and management for the depths of the dive. He was properly equipped, and the gear, including his lights, was in good operating order. It is speculated that he died of a myocardial infarction, and that the heart attack just happened to occur while he was cave diving. His death is the most recent of several cave diving deaths over recent years, in which the guidelines were followed but the death was attributed to medical reasons. Regardless of the specific cause, we can learn something from this death.

As divers we have a responsibility to make certain our health is in good order. That responsibility extends not only to ourselves, but our dive partners, our families, and the team members who may have to go in to find your body. Some medical events can occur with no warning. We can't change that. However, we can work to minimize the risks that lead to medical events. The general diving population has aged. In addition, as we age, many medical conditions can sneak up on us if we are not careful. Much of the cave diving community is comprised of older divers and with age also comes health problems. No matter what your age, if you have, or suspect, any medical condition, we encourage you to seek out the care of a qualified physician who is familiar with diving and the risks involved. Get a physical exam each year to ensure things have not changed since the last one. If you take medications, you should take them as prescribed, and not skip a day. Your body comes to depend on these things and any changes, even the omission of the medication, can adversely affect you. The NACD has medical guidelines on our website for you and your physician to review.

In addition to general health conditions, there are certain lifestyle choices people make that affect their health and safety. Things such as tobacco use (of any kind), alcoholic beverage intake, illegal drug use and being overweight, are a few of the things that do not match up well with diving. If you are affected

by any of these issues, it would help to seek out some assistance to help control, or remove these problems, from your life. It may benefit your health, and your diving.

Traditionally, the guidelines of accident analysis have been remembered by the mnemonic "Thank Goodness All Divers Live." I propose we evolve that into "Thank Goodness All Divers Live Healthy." We should be properly trained for the dives we are doing. We should always maintain a continuous guideline to open water. We should practice conservative gas management. We should carry at least three lights, and keep our dive equipment in good condition. We should also ensure we maintain a healthy lifestyle and are fit enough to dive.

These guidelines bring us to the most recent deaths that occurred at Eagle's Nest. A father and son, in the excitement of the holidays, decided to take new scuba diving equipment they had received for Christmas on a dive in Eagle's Nest. This wasn't just a test dive in the open water portion of the basin. This was a dive to the entrance of the cave system at the bottom. Those who are familiar with Eagle's Nest know that the entrance at the bottom of the basin is not large enough to stumble into. The dive computers recovered from the father and son, indicate they had gone to 233 feet of depth, a zone well inside the cave. There are many discussions on the social media sites about their lack of training and experience. We know that neither diver was cave trained or certified, the first guideline violated. The son, who was 15 years old, allegedly did not hold any scuba certification at all. It is believed this was not their first time diving in a cave. If this is true, then they have been lucky up until this fatal dive.

NACD standards allow for a 16 year old to complete Cavern and Intro Cave Diving courses with parental consent. Usually this is only done when one of the parents is already a trained and certified cave diver. Minimum age for Apprentice and Cave Diver courses is 18 with no exceptions. Even if the child was 16 years old, Eagle's Nest is not a cavern level or intro cave level dive. Eagle's Nest is a highly advanced cave dive that requires decompression procedures using multiple gases including Trimix. The 15-year-old child should never have been inside this, or any other cave.

It is very likely the gas management guideline was violated, as evidence suggests the son ran out of air. The final guideline that was violated was diving too deep for their gas mixture. Their computers indicate they had been to 233 feet. They were breathing air, which is inappropriate for that depth due to the effects of nitrogen narcosis, and is beyond the maximum operating depth from an oxygen content standpoint.

Social media reports include comments of people who knew this father and son had been diving Eagle's Nest. Whether this is true or not, is not relevant at this point. That won't change the outcome of their last dive. However, we, as a community, have the responsibility to keep watch over ourselves. We should not sit by quietly when we hear someone who is not cave trained, is diving in caves. We need to talk to them and help educate them. We need to tell them stories about prior deaths that could have been avoided, so maybe we will avoid more senseless deaths in the future. We need to involve their families and make sure they know the truth about the dangers of diving in an overhead environment without the proper training. It is each of our responsibilities as cave divers to intervene and help point probable future victims to safe cave diving training.

Many leaders, trainers and certified cave divers are angry about these deaths. For the cave diver that died in Mexico, they are angry because health conditions took him. But for the father and son, the anger is about the stupidity of it all - the senseless deaths of young men that clearly could have been avoided. Rather than be angry at them, we as cave divers need to use this energy in a positive way to educate

others about the wonders, challenges, dangers, and rewards of cave diving. Entering a cave is not a right, it is a privilege, and not everyone gets to experience that privilege. With the new year upon us, take a moment to pause and re-evaluate your own health and training. If it is not up to par take some time and bring it back to where it should be. Our goal for 2014 is to have zero fatalities. It is your responsibility to help us get there.

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