## Is There A Diver Med Tech in The House?

On the many expeditions, operations, and projects I've been part of whether military, exploratory or scientific there are always a few ubiquitous and essential skills to have within your team. A medic, and ideally one familiar with the types of injuries and illnesses likely to occur in the locations and pursuits you are undertaking, is a must have.

First Aid <u>courses</u> are well worth undertaking. They give us the confidence to deal with situations, allow us to help those in need and give others the confidence and comfort that someone can render assistance should something go wrong. However, a basic course may not furnish us with the skills to deal with more traumatic, complicated or specialist problems, especially if we are farther from the normal support provided by the emergency services, e.g. offshore, in a cave system or in a remote part of the world.

An advanced medical technician's course, like the medic courses I have done as part of my role in both mountain and cave rescue teams, goes into greater depth and provides more advanced skills. These skills can save lives where those with only first aid training may fall short. However, some of the injuries and illnesses we are potentially exposed to as divers are unlike any other forms of medical problem and therefore not covered on a standard course. Some problems, like jellyfish stings or burst eardrums are not unknown outside the diving world but are rare. But others, like decompression illness, will only present in a diver and therefore require a specialist type of medical technician – a **Diver Medical Technician**.



I attended the course run by DAN Europe Instructor and The Diver Medic founder Chantelle Newman. A course like this is normally run over ten days but now there is an option to train a significant proportion of the theory elements online before attending five days of hands-on learning. The online syllabus covers the full range of topics using slides, reading, audio and video material and can be completed at a student's own pace and to fit in around that student's life. My work means I keep odd hours, days and weeks and tend to have a busy schedule. It's unlikely I would have been able to ring-fence two full weeks to attend this course. However, completing the **online work** over the weeks leading up to a **five day face-to-face group course** was manageable.

A basic course may not furnish us with the skills to deal with more traumatic, complicated or specialist problems, especially if we are farther from the normal support provided by the emergency services, e.g. offshore, in a cave system or in a remote part of the world. Although, in a post-Covid 19 world, we have become more accepting of online and virtual learning some subjects need to be taught, practiced and examined 'in the flesh'. It is essential the second week is inperson and with other students to allow everyone to ask questions, discuss differing real-world experiences and alternative viewpoints in order to allow students to build up as broad and robust a picture as possible of potential scenarios, pit-falls and solutions.

There is also the chance to practice using diagnostic equipment on real people, run through realistic scenarios and practice practical treatment methods, some on fellow students and some on medical mannequins depending on safety. This hands-on time is essential as the course is not designed to provide a theoretical level of knowledge to pass a written exam but to produce people capable of helping others in the real world.



The course, both online and practical, covers those subjects included in a basic and advanced first aid course but also delves into measuring, recording, assessing, re-assessing and interpreting the signs and symptoms of your casualty in order to conclude what the best course of action may be. These techniques include the use of equipment to monitor and test **blood glucose**, **heart rate**, **tissue oxygen saturation**, **blood pressure** and **urine**. The information gained from these methods will allow you to diagnose and treat many more problems than someone who is only first aid trained. There is also instruction on more advanced techniques and the associated equipment like **advanced airway management**, **wound dressing and splinting**, **dental problems**, **suturing** (stitching), **catheterisation** and **intravenous infusion**.

## These skills can save lives where those with only first aid training may fall short.

Then there are those topics specific to divers. In reality I have found accidents around a diving trip tend to

be less unusual, although not necessarily less serious, like lacerations, broken bones, dislocated joints, concussion, anaphylaxis, hypothermia, sun-stroke, heart attacks and more. I have seen more accidents happen on a boat than I have underwater. So these core medical skills are important. But unlike a standard medic we, as divers, have to be capable of dealing with these more common problems and those specific to diving.

I have already mentioned **Decompression Illness** and others could include **damage to the ears**, **sinuses**, **lungs** and **eyes** due to the pressure changes we experience, a higher risk of **drowning**, **oxygen toxicity**, **carbon monoxide** or **dioxide poisoning**. Many of these are unlikely to occur on dry land but can be relatively common in diving. The course is always being developed and updated and I've recently noticed subjects like **in-water recompression** and improvised medicine, which are useful subjects in remote locations. The updated course also includes subjects such as **children in diving**, which reflects the growing number of younger people getting involved in the sport.



No emergency medical technician is meant to cure people. The purpose is to halt their decline, or even merely slow it down, sufficiently to get them to a hospital that has the number of professional specialists and equipment to stabilise them and begin the process of making them better. A first aid course is one

that means an individual is able to provide basic skills to deal with simple issues so someone can be kept alive until the emergency services arrive. A course like the **Diver Medical Technician** provides the skills to deal with much more complicated and serious situations and provide support to a casualty for extended periods of time.

## It is not an exaggeration to say these skills make a decisive difference in a situation that would otherwise result in a fatality.

The additional assessment and treatment skills necessary for dealing with casualties of diving-specific hazards is also something essential when diving in remote parts of the world. And this remoteness need not be in an Amazonian Lake or deep in an Indonesian cave system but on a diving day boat or live-aboard that may still be many hours from professional help and involve a situation that a normal medic, untrained in hyperbaric medicine, would struggle with. It is not an exaggeration to say these skills make a decisive difference in a situation that would otherwise result in a fatality.



I first did a course like this in the British Forces, the Defence Diver Medical Technician, almost 20 years ago. Since then I have requalified every few years to maintain my certificates and my skills. It not only gives me the confidence to lend assistance where needed it gives me the skills to ensure that assistance is actually useful. A life in diving, whether as a career or hobby, is a journey full of the accumulation of knowledge. But the knowledge gained on this course could save a life. The **Diver Medic Technician** course is designed for all those divers who are involved in Recreational, Technical, Scientific, Military, Police, Fire and Public Safety Diving, and divers working remotely. This course provides you with the skills necessary to deal with diving emergencies. Scuba divers face different situations compared to commercial divers working in highly dangerous situations, however the accident and mortality rate amongst recreational divers is higher, and their level of medical training lower.

The Diver Medic Technician course will not teach you how to dive, it will teach you how to save lives and assist in treating diving related injuries. It will teach you how to work under pressure and when to make that all important, life-saving decision.

Contents cover: incident and patient assessment, human anatomy, methods for monitoring vital signs, methods of caring for a casualty on site and during transportation, airway assessment and management with adjuncts, oxygen administration, CPR and AED, management of minor and catastrophic bleeding, suturing, poisoning, and much more.

## About the author

Andy Torbet is a Scottish underwater explorer, professional cave diver, skydiver, freediver and climber, Film Maker and TV Presenter. Andy is a longtime DAN Europe Member and Ambassador.