



Cold Water Survival, Hypothermia, Rescue & Recovery

by VINCENT T. PICA, II

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As you know, we've written about hypothermia many times here.* It is a subject that my son and I, members "back in the day", of a USCGAux Cold Water Team, were trained in. Recently, amongst the professional life-saving community, whispers started that we have had it all wrong, that data, from US Navy studies from the post WW-II era on "Time of Useful Consciousness" that came from molded dummies with internal brass skeletons, didn't calibrate to live testing conducted by various scientific and medical studies done in the last couple of years. Further, medical testing of the effects of cold water on the human physiology would lead one to believe that the standard "fireman's hoist**" of a stricken mariner, taught everywhere, could in fact lead to a worsening of the effects of cold water on the victim, even leading to death. This column, replacing ALL the columns I've written about this subject, is about that.

The Cold Facts

Back in August 2010, while attending the National Convention of the US Coast Guard Auxiliary in Phoenix, AZ, I attended a presentation on this topic by a Canadian organization called Cold Water Boot Camp (www.coldwaterbootcamp.com) which works in cooperation with many life saving organizations, including the US Coast Guard.

In the video part of the presentation, I saw a good friend and fellow member of US Coast Guard Forces - Mario Vittone, USCG Marine Safety Specialist and former Helicopter Rescue Swimmer Instructor - featured in the video as one of the guinea pig subjects. In the past, Mario would ping me with commentary on the aforementioned columns on hypothermia. "Vin, some of the this stuff is not lining up with the latest data. Be careful!" The problem I had was in sorting out that which was still good and that which was good to go - as it "outta here!" There was no official report to rely on. Well, not only was there now an

official scientific report to rely on, but I could talk directly to one of the subjects - Mario Vittone, USCG. In fact, Mario has published a detailed article on the subject - <http://mariovittone.com/2010/10/the-truth-about-cold-water/> - which I want to acknowledge here as an underlying source document to this column.

Traditions Die Hard at Sea

It isn't easy convincing mariners that a life-time of tradition and practice is wrong. And not everything we know and practice on this subject IS wrong. Here are the facts:

The first is phase of cold water immersion is called the cold shock response. This we've had right and have written about before, (see SSP, "Going Down For The Third (and Last) Time", 7/15/09.) Data now shows that roughly 20% die in the first two minutes. They take on water in that first uncontrolled gasp, panic and drown, plain and simple. In some, the cold shock triggers a heart attack. Surviving this stage requires you to stay calm and get your breathing under control. If you don't, your life is measured in minutes and you won't need your other hand to count them. A further consequence of this phenomenon is that you will rapidly lose your physical capacity to swim. Even the strongest swimmer can't fight Mother Nature - your body's natural reaction to all this cold water is to protect the inner core. It does this by constricting blood flow to the outer extremities and keeping as much warm blood as possible around the inner core. We had this right too. I've described it as "being drunk without the booze." Fine motor skills go, followed by gross motor skills, followed by, well, death by drowning. You can't swim without arms and legs (read: extremities) working.

What we had completely wrong was this. To quote Mario Vittone directly:

It is impossible to get hypothermic in cold water

unless you are wearing flotation, because without flotation - you won't live long enough to become hypothermic.

This leads me to the next thing we had completely wrong - "that a 50 year old man would last 50 minutes in 50 degree water." All the timings are wrong - if you had a life-jacket on. The good news is that we last longer, far longer, before losing consciousness and ultimately reaching the point of no return.

Don't Lose Them During Rescue!

One of the things we also got wrong, alluded to at the start, was how to rescue them. The presentation showed rescuers keeping the victim horizontal - not vertical, ever - while getting them into the boat! This is because of what is called post-rescue collapse. Hypothermia makes everything colder, which makes it slower and closer to the edge of collapse. The rescue itself is stressful to a fragile heart - potentially leading to cardiac arrest. They keel over right in front of you, as you haul them over the gunwales and try to get them out of wet clothes (a struggle in itself) and into dry ones. Quoting Mario Vittone again, "Until everything is warmed back up - out of the water and dry is good enough - mobility comes later."

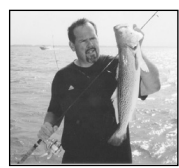
BTW, if you are interested in being part of USCG Forces, email me at JoinUSCGAux2010@aol.com or go direct to John Blevins, who is in charge of new members matters, at FSO-PS@emcg.us and we will help you "get in this thing..."

* "Surviving Hypothermia", 2/14/07

"Warm Air, Cold Water", 3/4/09

"Warm Air, Cold Water, 2010", 3/3/10

** With two rescuers, one with each arm of the victim, would "bob" the stricken mariner up and down, "1-2-3 and HEAVE in" and use some the natural buoyancy of the human body to help the rescuers get the person out of the water, over the gunwales and into the boat.



FISHING WITH TONY

STRIPERS OFF THE CHARTS, WITH BLACKFISH NOT FAR BEHIND

by TONY SALERNO

The October full moon of 2010 will go down as a memorable one to striper enthusiasts just outside the south shore bays from Fire Island to Montauk this week as massive, and I mean massive schools of striped bass began their fall migration trek this week. There is an enormous amount of linesiders between 10 and 40-pounds that has been invading the ocean beaches, the inlets and ocean water depths inside of 65-feet. In fact, all you need to do is motor east of Fire Island Inlet either with a 4x4 truck along the beach, or by boat, and its a pretty sure bet that you'll see thousands of flocking gulls in a particular area wheeling and screeching overhead awaiting a chance at plucking some frantic leaping baitfish which are ever so desperately trying to avoid becoming a meal from the insatiable appetites of the bass.

Suds surfers have been slamming bass along the Fire Island National Seashore all the way to Montauk at any given time primarily on plugs, tins and bait, while boatmen find the best bite occurring on diamond jigs. Anglers preferring to stay within the confines of the inlets from Fire Island to Shinnecock are finding that drifting live spot or croakers during the day, or drifting live eels at night are accounting for some exceptional striper fishing as well. This past week I teamed with my good buddy Paul Nilsson and a couple other friends for a few nights of striper fishing inside Moriches Inlet. With the exception of Wednesday evening, the bass fishing was insane the rest of the week with Friday evening being the best with all the bass you wanted to catch and the largest taken by Paul weighing in at 36.8-pounds. As I pen this column, the bass fishing remains of the charts and should continue to do so into most of November. Therefore if you yet to have your fill, hit the water before its all over.

In the meantime the north shore is beginning to see a banner season peaking on the blackfish front as scores of the chisel tooth critters fill out limits and coolers just about anywhere you can find a submerged rock pile. Cranes Neck and especially Old Field Point as been real good this week, but you'll need to cull through a bunch of shorts to put together a limit of fish that have been ranging between 2 and 8-pounds. The deeper water areas in the Sound such as the Middle Grounds is beginning to produce some real brutes to 12-pounds and that fishing will only get better as the water temperatures come down to 55 degrees.



Suffolk County Legislator Jack Eddington

What Most People Don't Know about Our Patchogue Health Center

The South Brookhaven Family Center, what we call locally the Patchogue Health Center, has been the subject of some debate recently - whether it should be relocated (I think it should be) and whether it has outgrown the building it has operated out of since 1975 (I believe it has). The facility, which has been located on East Main Street since the day it was built, has served its surrounding communities faithfully, but remained something of a mystery to those of us who use private doctors. For this reason and because I knew I needed to see firsthand the health center I have been advocating for and helping to make decisions about, I took a tour. For several hours, I became a health center patient, and what I saw and experienced was impressive.

First of all, there was little to no wait to see a doctor. You read that correctly. At a public health facility, the wait was less than the wait most of us experience at a private doctor's office. Visitors to the health center wait in one of two lines: patients with an appointment and walk-ins. As a patient with an appointment, I was taken care of very quickly, but I watched and the people in the line without appointments did not have to wait inordinately. In fact, the average cycle time from the time a patient walks in, is seen, and leaves is one hour and 24 minutes (and that includes labs and x-rays). With a new streamlined system, this time has been reduced from two and one-half hours of wait time.

What is also impressive is that along with the reduced cycle time comes a level of healthcare service and attention that is stellar. Patients are moved efficiently and compassionately through sparkling clean stations; the doctors, nurses, and health care professionals work in teams. In this way, patients are diagnosed, treated, and educated since one of the big thrusts of the health center is teaching its clientele to practice prevention and take on healthier habits. If they need blood drawn, if they require x-rays, it's all done right at the center. In fact, the services the health center provide are comprehensive and too many to list here.

And then there is the dedication of the staff. Numbers of the professionals working at the health center have been there for decades and remain so dedicated to the kind of care they give and the community they serve that they would not think of leaving. They speak proudly about the adults they now serve who were brought into the center as infants. In this way, it really is a family center. It serves a very large population, many of which are women and infants, but it certainly doesn't stop there. And finally, the only stipulation to use the center is that you must be uninsured. And these days that number keeps going up.

I was extremely impressed with our Patchogue Health Center. It is a government-run facility and contrary to all the dire talk about government and health care, it works beautifully.