



# Rescue, Recovery and Re-warm the Maritime 3 R's



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When we were kids, it was all about readin', ritin' and 'rithmetic. On the sea, especially in cold water environments, it is all about rescue, recovery and re-warming. I don't expect that there are many boaters out there on our bays, creeks and littoral areas of the ocean now. But some are out there. And the waters will still be cold once April 1 comes around and the moorings go back in. This column is about that.

## He Fell In And Can't Get Out-Rescue

We've written about the new NYS law that requires PFDs on all boaters in boats under 21' between 11/1 and May 1 of the following year (see SSP, "New York State - New Life-Jacket Law Goes Into Effect Nov 1, 2009", 11/4/09) and about hypothermia (see SSP, "Surviving Hypothermia", 2/14/07.) When I wrote about hypothermia, I suggested that you conduct a little experiment with the kids (or yourself!) to demonstrate the power of water to draw heat out of you - 25x faster than air of the same temperature. To prove it, try this experiment with the kids... get a glass of water to room temperature and drop an ice cube in it; at the same time, lay an ice cube on a napkin next to the glass of water. When the ice cube in the glass has melted away, there will still only be a small amount of dampness around the ice cube sitting on the napkin... But, upon further research conducted by cold-water specialists in

Canada (where the water is cold all the time, when it isn't frozen), exertion - such as thrashing or swimming - can increase that heat-stealing mechanism up to 10x - that's 250x now!

So, if someone falls in, it is critical to get them out ASAP. See SSP, "Man Overboard!", 11/8/06, 10/29/08, and 11/19/08.

## When Rescue Become Recovery

By USCG standards, a rescue becomes a recovery when the victim has died from the circumstances. So, if someone just falls in, it is still a rescue, right? Well, hopefully, but there are circumstances when death can come almost unbelievably quickly. As pointed out here, (see SSP, "Going Down For The Third (and Last) Time", 7/15/09) cold water - sudden cold water - can be a killer long before hypothermia gets to you:

1. A splash of cold water in your face can cause you to involuntarily inhale water, which is a killer. Not swallowing it down your throat into your stomach but inhaling it into your lungs. This is the "gasp reflex."

2. In some people, the reaction doesn't get that far into their bodies. They hit the cold water and, as soon as it touches the back of their throat, it closes up. The spasm stops the water from getting into the body, which is the biological intent, but it also stops air from getting to the lungs. The person bobs back to the surface (their lungs are full of air) and they suffocate

in the open water, unable to breathe due to a blocked air passageway. This is what is now called "dry drowning." There is no water in the lungs. Nor is there any oxygen. I've seen a BoatUS report that stated that 15-20% of all drowning are "dry drownings."

3. When the difference between your body temperature and the water temperature is greater than 30-degrees, the chance of a heart attack from the sudden immersion goes up dramatically.

4. Even something as simple as a racing heart from shock and fear can create hyperventilating on the part of the victim. Dizziness followed by unconsciousness results as the ratio of oxygen/carbon dioxide changes in the victim's blood system.

If you are the victim, remember this: an initial deep and sudden gasp followed by hyperventilation that can be as much as 600-1000% greater than normal breathing. You must keep your airway clear or run the risk of drowning. Cold Shock will pass in about one minute. During that time, concentrate on avoiding panic and getting control of your breathing. Wearing a lifejacket during this phase is critically important to keep you afloat and breathing.

## OK- We Have Them In the Boat - Now What? - Re-Warm!

Believe it or not, if you apply heat directly to the arms and legs of a hypothermic person you just pulled from the sea, you can kill them. It is

called the "After Drop" - you force cold blood that has pooled in the arms and legs (constricted blood vessels) back toward the heart and brain and that lowers their body temperature. Apply heat (hot water bottle, towels that have been microwaved, heating pads, your warm, dry hands) to the head, neck, chest and groin. Of course, you need to get them into a warm or at least dry environment as part of the rescue... lie them on their back or side (not face down)... This person is dying, so there is no time to be squeamish or bashful. Lie on top of them and wrap a blanket around you both... There are two schools of thought on getting them out of the wet clothes. Some believe that the little bit of water than you can warm with your body can aid in their recovery. My own experiences lead me to believe that, if the alternative is wet clothes or just a blanket around a naked body, go with the wet clothes and cover them up with blankets and your warm body... If they are conscious, give them warm - not hot - liquids. Add sugar for energy. No alcohol and avoid caffeine if possible...

Bring 'em back alive, captain.  
BTW, if you are interested in being part of USCG Forces, email me at JoinUSCGAux@aol.com or go direct to the D1SR Human Resources department, who are in charge of new members matters, at DSO-HR and we will help you "get in this thing..."

## DEC Reminds Hunters to Be Safety Conscious

The New York State Department of Environmental Conservation (DEC) is advising hunters to use safety precautions when enjoying the sport this hunting season which runs until December 4 for the Northern zone and December 11 for the Southern zone.

"New York has more than 3,000 dedicated volunteer sportsman education instructors whose goal is to create an extremely safety-conscious generation of hunters," said DEC Commissioner Joe Martens. "We want to take this opportunity to remind hunters to be extra vigilant this year and make 2011 one of the safest hunting seasons on record."

Studies show that individuals wearing hunter orange clothing are seven times less likely to be injured than hunters who do not wear the bright fluorescent color. Over the past 10 years, 15 New York state big game hunters have been mistaken for deer or bear and killed - none wore hunter orange.

Hunters are encouraged to review hunting safety tips at DEC's website ([www.dec.ny.gov/outdoor/9186.html](http://www.dec.ny.gov/outdoor/9186.html)) and pay careful attention to basic firearm safety rules that can prevent hunting-related shooting incidents:

- Point your gun in a safe direction.
- Treat every gun as if it were loaded.
- Be sure of your target and beyond.
- Keep your finger off the trigger until ready to shoot.
- Remember to wear hunter orange.

Hunting accidents generally have been on the decline, continuing a 50-year trend of increasing safety. Reports indicate that 2008 and 2009 were statistically the two safest years in the history of hunting in New York State. Although the 2010 report showed a minor increase in hunting related shooting incidents from the previous two years, the total incidents reported in 2010 were still well below the average of 66 incidents per year from the 1990s, and 137 incidents per year during the 1960s. Big game hunting incidents continue to be very low compared to previous decades, despite the increase in rifle zones and the passage of the youth mentoring law in 2008.

The number of hunters is declining, but the hunting incident rate (incidents per 100,000 hunters) is falling much faster than the number of hunters. During the 1960s, the incident rate was 19 incidents per 100,000 hunters. Since 2000, the incident rate is one-third of that, averaging 6.4 incidents per 100,000 hunters.

To put hunter safety into perspective, hunting is considerably safer than such common activities as swimming, riding a bike or driving a car.

## Tides for Moriches Inlet starting with November 30, 2011

Day	High/Low	Tide Time	Height Feet	Sunrise/Sunset	Moon Time	% Moon Visible
Wed. 30	Low	4:06 AM	0.2	6:55 AM	Rise 11:10 AM	25
30	High	10:37 AM	3.1	4:25 PM	Set 10:20 PM	
30	Low	4:47 PM	0.1			
30	High	11:15 PM	2.7			
Thurs. 1	Low	5:04 AM	0.4	6:56 AM	Rise 11:38 AM	35
1	High	11:30 AM	2.9	4:24 PM	Set 11:22 PM	
1	Low	5:41 PM	0.2			
Fri. 2	High	12:08 AM	2.7	6:57 AM	Rise 12:04 PM	44
2	Low	6:08 AM	0.5	4:24 PM		
2	High	12:20 PM	2.7			
2	Low	6:36 PM	0.2			
Sat. 3	High	12:58 AM	2.7	6:58 AM	Set 12:21 AM	54
3	Low	7:12 AM	0.5	4:24 PM	Rise 12:29 PM	
3	High	1:11 PM	2.6			
3	Low	7:29 PM	0.3			
Sun. 4	High	1:49 AM	2.7	6:59 AM	Set 1:19 AM	64
4	Low	8:10 AM	0.5	4:24 PM	Rise 12:54 PM	
4	High	2:03 PM	2.5			
4	Low	8:16 PM	0.2			
Mon. 5	High	2:39 AM	2.8	7:00 AM	Set 2:17 AM	72
5	Low	9:01 AM	0.4	4:24 PM	Rise 1:21 PM	
5	High	2:57 PM	2.5			
5	Low	9:00 PM	0.2			
Tues. 6	High	3:28 AM	2.9	7:01 AM	Set 3:15 AM	80
6	Low	9:47 AM	0.3	4:23 PM	Rise 1:50 PM	
6	High	3:50 PM	2.5			
6	Low	9:43 PM	0.2			
Wed. 7	High	4:15 AM	3.0	7:01 AM	Set 4:14 AM	87
7	Low	10:32 AM	0.2	4:23 PM	Rise 2:23 PM	
7	High	4:39 PM	2.5			
7	Low	10:25 PM	0.1			
Thur 8	High	4:57 AM	3.1	7:02 AM	Set 5:12 AM	93
8	Low	11:16 AM	0.1	4:23 PM	Rise 3:01 PM	
8	High	5:23 PM	2.5			
8	Low	11:07 PM	0.1			