



Safety Thursday

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Drowning Doesn't Look Like Drowning

By Mario Vittone

The new captain jumped from the deck, fully dressed, and sprinted through the water. A former lifeguard, he kept his eyes on his victim as he headed straight for the couple swimming between their anchored sportfisher and the beach. "I think he thinks you're drowning," the husband said to his wife. They had been splashing each other and she had screamed but now they were just standing, neck-deep on the sand bar. "We're fine, what is he doing?" she asked, a little annoyed. "We're fine!" the husband yelled, waving him off, but his captain kept swimming hard. "Move!" he barked as he sprinted between the stunned owners. Directly behind them, not ten feet away, their nine-year-old daughter was drowning. Safely above the surface in the arms of the captain, she burst into tears, "Daddy!"

How did this captain know – from fifty feet away – what the father couldn't recognize from just ten? Drowning is not the violent, splashing, call for help that most people expect. The captain was trained to recognize drowning by experts and years of experience. The father, on the other hand, had learned what drowning looks like by watching television. If you spend time on or near the water (hint: that's all of us) then you should make sure that you and your crew knows what to look for whenever people enter the water. Until she cried a tearful, "Daddy," she hadn't made a sound. As a former Coast Guard rescue swimmer, I wasn't surprised at all by this story. Drowning is almost always a deceptively quiet event. The waving, splashing, and yelling that dramatic conditioning (television) prepares us to look for, is rarely seen in real life.

The Instinctive Drowning Response – so named by Francesco A. Pia, Ph.D., is what people do to avoid actual or perceived suffocation in the water. And it does not look like most people expect. There is very little splashing, no waving, and no yelling or calls for help of any kind. To get an idea of just how quiet and undramatic from the surface drowning can be, consider this: It is the number two cause of accidental death in children, age 15 and under (just behind vehicle accidents) – of the approximately 750 children who will drown next year, about 375 of them will do so within 25 yards of a parent or other adult. In ten percent of those drownings, the adult will actually watch them do it, having no idea it is happening (source: CDC). Drowning does not look like drowning – Dr. Pia, in an article in the Coast Guard's On Scene Magazine, described the instinctive drowning response like this:

Except in rare circumstances, drowning people are physiologically unable to call out for help. The respiratory system was designed for breathing. Speech is the secondary or overlaid function. Breathing must be fulfilled, before speech occurs. Drowning people's mouths alternately sink below and reappear above the surface of the water. The mouths of drowning people are not above the surface of the water long enough for them to exhale, inhale, and call out for help. When the drowning people's mouths are above the surface, they exhale and inhale quickly as their mouths start to sink below the surface of the water.

Drowning people cannot wave for help. Nature instinctively forces them to extend their arms laterally and press down on the water's surface. Pressing down on the surface of the water, permits drowning people to leverage their bodies so they can lift their mouths out of the water to breathe.

Throughout the Instinctive Drowning Response, drowning people cannot voluntarily control their arm movements. Physiologically, drowning people who are struggling on the surface of the water cannot stop drowning and perform voluntary movements such as waving for help, moving toward a rescuer, or reaching out for a piece of rescue equipment.

From beginning to end of the Instinctive Drowning Response people's bodies remain upright in the water, with no evidence of a supporting kick. Unless rescued by a trained lifeguard, these drowning people can only struggle on the surface of the water from 20 to 60 seconds before submersion occurs.

(Source: On Scene Magazine: Fall 2006 (page 14))

This doesn't mean that a person that is yelling for help and thrashing isn't in real trouble – they are experiencing aquatic distress. Not always present before the instinctive drowning response, aquatic distress doesn't last long –

but unlike true drowning, these victims can still assist in their own rescue. They can grab lifelines, throw rings, etc.

Look for these other signs of drowning when persons are in the water:

- Head low in the water, mouth at water level
- Head tilted back with mouth open
- Eyes glassy and empty, unable to focus
- Eyes closed
- Hair over forehead or eyes
- Not using legs – Vertical
- Hyperventilating or gasping
- Trying to swim in a particular direction but not making headway
- Trying to roll over on the back
- Appear to be climbing an invisible ladder.

So if a crew member falls overboard and everything looks OK – don't be too sure. Sometimes the most common indication that someone is drowning is that they don't look like they're drowning. They may just look like they are treading water and looking up at the deck. One way to be sure? Ask them, "Are you alright?" If they can answer at all – they probably are. If they return a blank stare, you may have less than 30 seconds to get to them. And parents – children playing in the water make noise. When they get quiet, you get to them and find out why.

Reprinted by permission from <http://mariovittone.com/2010/05/154/>, courtesy of the author. Mario Vittone has been heading offshore since 1985. His first experience with at-sea emergencies came that first year as ship's company aboard the USS Coral Sea, a WWII era aircraft carrier. Joining the Coast Guard in 1991 he worked at Training Center Cape May before transferring to the Cutter Point Franklin as a helmsman and small boat coxswain. He graduated from Helicopter Rescue Swimmer School in 1994 and began his career as a rescue swimmer with two tours at Air Station Elizabeth City, one at Air Station New Orleans, then finally as an instructor and course developer at the Aviation Technical Training Center in Elizabeth

City, NC. He recently retired from the U.S. Coast Guard following four years as a vessel inspector and accident investigator in Norfolk, Virginia.

Mario is a leading expert on immersion hypothermia, drowning, sea survival, and safety at sea. His writing has appeared in Yachting Magazine, SaltWater Sportsman, MotorBoating Magazine, Lifelines, On-Scene, and Reader's Digest. He has developed courses for municipal rescue teams and the military on search and rescue tactics and open ocean survival. In 2007, he was named as the Coast Guard Active Duty Enlisted Person of the Year and was named as the 2009 recipient of the Alex Haley Award for Journalism. Mario lives with his family in Coastal Virginia, and when he's not writing about the water he can be found on his 32 foot St. Tropez, making sure she stays above it.

Note: The purpose of this article is to highlight some of the Mac Safety Regulations and how your crew can race the Mac as safely as possible. As always, ultimate responsibility for the safety of the crew and the decision whether to race or to stop racing is that of the skipper (RRS4, MSR2). This email is meant as a courtesy only and you should always refer to the Race Documents section of the website for the Notice of Race, Sailing Instructions and Mac Safety Regulations, which govern the race.