



Surviving Hypothermia

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When I wrote about skippering in Heavy Weather, I promised to come back to you about hypothermia - low body temperature. If you get too cold, long before you freeze to death, you will succumb to hypothermia. - the lowering of internal body temperature until death occurs. Remember this: water conducts heat away from your body 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.

Signs of Hypothermia:

When I teach seamanship courses, I tell the skippers that the easiest and surest sign of hypothermia in yourself or others is "getting drunk without the booze," that is, reflexes slow, fine motor skills start to disappear (have the person tie a bowline), speech starts to slur, hard to concentrate and, worse of all, their shivering stops.

When the shivering stops, it is the body starting to shut down functions that are taking away from survival. It will just keep shutting down functions until you stabilize at some low

and diminished capacity or you become unconscious. Death follows.

What Happens When?

- 98.6 degrees F - all is good...
- 98 - 96 degrees F - shivering starts and can't be stopped; can walk and talk but fine motor skills are diminishing
- 96 - 93 degrees F - stumbling and fumbling starts in earnest. Sometimes, the person can become violent; they are irritated by these same diminishments.
- 93 - 86 degrees F - the body begins to shut down as blood moves away from the outside and pools what heat it can on the inside; shivering fades; drowsiness overwhelms. The death spiral has begun in earnest...

What to Do?

If you've capsized, climb up on top of the boat, i.e., get out of the water (remember the ice cube experiment). If someone has fallen in, throw them a PFD, a cushion, a fender - anything - to minimize their struggling. Increased heart beat increases the rate of blood flow from the cold extremities to the warm interior and back again - driving core temperature down even faster. Unless you are absolutely sure you can make it to shore, don't try to swim to shore. Assume the "HELP" position (Heat Escape

Lessening Position) by bringing your knees up against your chest. At least cross your legs (protect blood vessels around the groin) and cross your arms across your chest (protect blood vessels under your arms). If you are in the water with a group, huddle together for warmth and, most importantly, encouragement!

Treating the Hypothermic Person...

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. Be aware that their skin is now extremely sensitive to temperature and touch. Of course, you need to get them into a warm or at least dry environment as part of the rescue. Place 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 that 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.

And call for help. The USCG will have an ambulance meet you at the dock as you come alongside.

If you are interested in being part of USCG Forces, email me at USCGAUX2006@aol.com or go direct to MaryJo Cruickshank, who is in charge of new members matters, at FSO-PS@emcg.us and we will help you "get in this thing..."

| February 2007 - Moriches Inlet | | | | | |
|--|-----------------|------------------|-----------------|------------------|-----------------|
| The Time Offsets mentioned in the column are as follows: | | | | | |
| Tidal Time Offsets from Moriches Inlet: | | USCG Station | Potunk Point | Mastic Beach | Smith Pt Bridge |
| High Tide | | +45 min | +4.5 hrs | +4.5 hrs | +3 hrs |
| Low Tide | | +2 hrs | +5 hrs | +5 hrs | +4 hrs |
| Day | High | Low | High | Low | High |
| Wed 14 | 03:47 AM / 2.91 | 10:16 AM / 0.10 | 04:19 PM / 2.40 | 10:16 PM / 0.08 | |
| Thu 15 | 04:42 AM / 3.15 | 11:05 AM / -0.11 | 05:10 PM / 2.65 | 11:09 PM / -0.13 | |
| Fri 16 | 05:31 AM / 3.37 | 11:52 AM / -0.32 | 05:57 PM / 2.90 | | |
| Sat 17 | | 12:00 AM / -0.31 | 06:17 AM / 3.52 | 12:37 PM / -0.49 | 06:42 PM / 3.12 |
| Sun 18 | | 12:50 AM / -0.44 | 07:03 AM / 3.58 | 01:21 PM / -0.60 | 07:28 PM / 3.28 |
| Mon 19 | | 01:39 AM / -0.50 | 07:49 AM / 3.52 | 02:03 PM / -0.64 | 08:16 PM / 3.37 |
| Tue 20 | | 02:27 AM / -0.47 | 08:38 AM / 3.37 | 02:46 PM / -0.57 | 09:06 PM / 3.39 |
| Wed 21 | | 03:17 AM / -0.35 | 09:31 AM / 3.15 | 03:30 PM / -0.42 | 10:00 PM / 3.34 |

Floyd Finishes Fourth In BNL Science Bowl



The William Floyd Science Bowl Team and coaches began practicing in December for Saturday's tournament. From left, Bryan Henn (12th grade); Erica Palma (12); Mrs. Lackemann, Science Department Head; Jon Ollett (12); Mike Liuzzi (11); Mrs. Quinlivan, Chemistry teacher; Rob Kimmerling (12).

staff, who had volunteered to help, tallied team scores and kept time while the aspiring adolescents were challenged with sick scientific trivia from the arcane annals of astronomy, biology, physics, chemistry, geology and the like.

Teams from 20 schools participated in this annual event. Ward Melville High School won first place for the fourth year in a row and will

advance to the Nationals. Local favorite William Floyd earned a berth in the semi-finals by taking first place in its opening round group that included Longwood, New Hyde Park, North Babylon and St. Francis. Floyd finished in fourth, losing in the final seconds of a close match against Elwood-John Glenn High. Half Hollow Hills West took second place.

by COGITO ERGO SUM

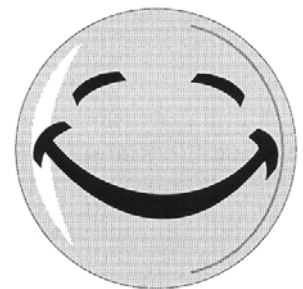
Blastospores, molecular bond angles, redundant intraferometric optics and thermoluminescence are all in an afternoon's play for high school science bowlers. These exceptional brainiacs from school districts around the county may look and act like normal teenagers,

but when they faced off against their rivals Saturday, February 10, at Brookhaven National Laboratory's science bowl death match, they cracked crania in crazy cogitative competition!

With proud parents in attendance for moral support, and at least one member of the press looking on in mute ignorance, BNL scientists and

sMILE...

It's That Simple.



wE CaTER tO ThE ApPREHEnSIVe Patient.

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