



# Hypothermia - Warm Weather, Cold Water, Ahead

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Despite the weather, spring will get here. The air may get warm but it will be a long time before the water does. But whether it is cold air or cold water, 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"... 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 F - all is good...
- <98 F, >96 F - shivering starts and can't be stopped; can walk and talk but fine motor skills are diminishing...
- <96 F, >93 F - stumbling and fumbling starts in earnest. Sometimes, the person can become violent; they are irritated by these same diminishment and, relatedly, by you pointing it out..!
- <93 F, >86 F - the body begins to shut down as blood moves away from the outside and pools what heat it can on the inside; shivering starts to fade in and out... symptoms of drowsiness become overwhelming... The death spiral has begun in earnest...

### What to Do?

If you 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 (see SSP, "Man Overboard!", 11/08/06 and 10/29/08), 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 (remember that increased heart beat conundrum!) Assume the "HELP" position (Heat Escape Lessening Position) which entails bringing your knees up against your chest... at a minimum, 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, 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 (think of those "pins and needles" you feel when your leg,

that has "fallen asleep", starts to wake up...) 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. In checking with USCG specialists in this area, the best answer is a naked body under a blanket. Get them out of the wet clothes if you can cover them with anything dry! If they are conscious, give them warm - not hot - liquids. Add sugar for energy. No alcohol and avoid caffeine if possible...

Remember the ice cube experiment. Get them out of the water... And call for help. The USCG can and will have an ambulance meet you at the dock as you come alongside...

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

## JUMBLE

Unscramble these four Jumbles, one letter to each square, to form four ordinary words.

EVAUM

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RONOC

CALAPE

www.jumble.com

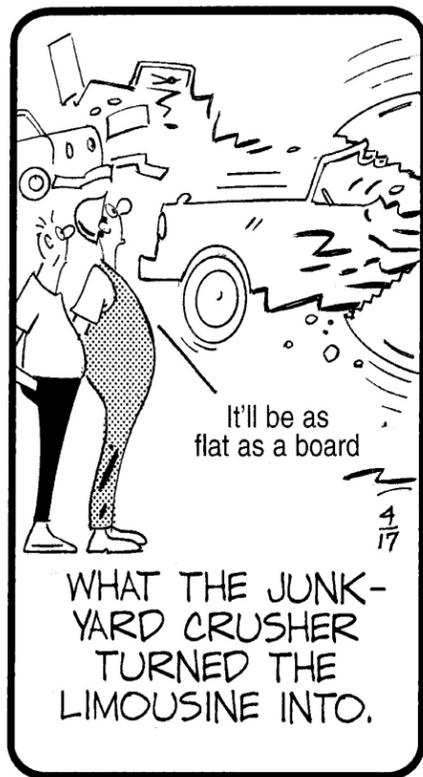
TOCHEL

Ans: A

(Answers tomorrow)

### THAT SCRAMBLED WORD GAME

by Henri Arnold and Mike Argirion



Now arrange the circled letters to form the surprise answer, as suggested by the above cartoon.

## CROSSWORD

1	2	3	4	5	6	7	8	9	10	11	12	13
14				15					16			
17			18						19			
20			21					22				
23			24					25				
			26				27			28	29	30
31	32	33		34	35	36						
37			38	39	40	41						
42			43	44	45	46						
47			48	49	50							
			51		52				53	54	55	
56	57	58			59				60			
61				62					63			
64				65					66			
67				68					69			

**ACROSS**

1	Hardy cabbage	51	Puts in danger	18	Anderson of "WKRP in Cincinnati"
5	Sleuth Sam	53	Mooncalf	22	Added subtle shading
10	__souci (carefree)	56	Offers to buyers	25	Fled
14	Carolina college	59	Canadian tree	26	Posh cushion
15	Skater Sonia	60	Chill	28	Yours and mine
16	Ring bearer?	61	Artist Cezanne	29	Arm bone
17	Flexible elevator?	62	Certain sacker	30	Pravda source
19	Stern section	64	Tuscany river	31	Church section
20	Born in Bordeaux	65	Opening bars	32	Second star designation
21	Sharif and Epps	66	Gymnast Korbut	33	Novelist Amelia
22	Crownlet	67	Offed	35	Pt. of speech
23	Draft letters	68	Actress Spacek	38	Ships' tillers
24	Club for short shots	69	Red root	40	Thickness measurer
26	Dryer trappings	<b>DOWN</b>		43	Whelp
27	Called loudly	1	"Growing Pains" co-star	45	Hotel hopper?
31	"Fernando" group	2	African succulents	48	Zodiac sign
34	Actress Scala	3	Runs at a steady gait	50	On a barge
36	Supernova formation	4	U-turn from WSW	52	Talks wildly
37	Humdinger	5	Disgracing	53	Leg joint
39	Atlanta-based medical org.	6	Too donnish	54	Blockade
41	Bruce and Laura	7	Agassi or Citroen	55	Jack of the nursery
42	"Silkwood" star	8	Double dagger	56	Hot tubs
44	Setup punch	9	Last of a command?	57	British peer
46	Gray and Candler	10	Tall, thin individual	58	"Clair de __"
47	Sound suppressor	11	Field of study	62	Fleur-de-__
49	Low fat	12	Proximate	63	Male swan
		13	Medical fluids		

See solution on page 7