

## Cold Water Boating Safety Tips.

- 1) Always wear a LIFE Jacket when in an open boat or on the deck, especially if operating solo.
- 2) At least the operator, and especially solo operators, should carry emergency communication devices (e.g. hand held VHF radio, cell phone in waterproof bag) and signaling devices (locator beacon and visual distress signals) **ON THEIR PERSON**.
- 3) Make sure the boat has a re-boarding device (such as swim step, ladder, or foot sling) that can be used by a person overboard.
- 4) Solo operators should **ALWAYS** attach an engine cut-off device when underway.
- 5) File (and stick to) a float plan. In other words, make certain that someone ashore knows when and where you are going as well as how long you expect to be gone.

<b>Water Temp ( degrees F)</b>	<b>Exhaustion or Unconsciousness</b>	<b>Survival Time</b>
<b>0-32</b>	<b>under 15 minutes</b>	<b>15-45 minutes</b>
<b>33-40</b>	<b>15-30 minutes</b>	<b>30-90 minutes</b>
<b>41-50</b>	<b>30-60 minutes</b>	<b>1-3 hours</b>
<b>51-60</b>	<b>1-2 hours</b>	<b>1-6 hours</b>
<b>61-70</b>	<b>2-7 hours</b>	<b>2-36 hours</b>
<b>71-80</b>	<b>3-12 hours</b>	<b>indefinite</b>
<b>over 80</b>	<b>indefinite</b>	<b>indefinite</b>

# HYPOTHERMIA FIRST AID

## ALL CASES

- Move victim to dry shelter and warmth
- Handle gently
- Remove wet clothes — cut off if necessary
- Apply mild heat (comfortable to your skin) to head, neck, chest and groin — use hot water bottles, warm moist towels
- Cover with blankets or sleeping bag; insulate from cold — including head and neck

## MILD CASES

- Primary task is to prevent further heat loss and allow body to rewarm itself
- Give warm, sweet drinks — *no alcohol*
- Apply mild heat source to stabilize temperature and/or
- Exercise to generate heat
- Hot shower to point of perspiring
- Keep victim warm for several hours

## MODERATE CASES

- Same as above
- Offer sips of warm liquids only if victim is *fully* conscious and able to swallow without difficulty — *no alcohol*
- Have victim checked by doctor

## SEVERE CASES

- Obtain medical advice as soon as possible using your radio
- Assist victim, but avoid jarring him — rough handling may cause cardiac arrest or ventricular fibrillation of heart
- No food or drink
- Observe for vomiting and be prepared to clear airway
- Ignore pleas of "Leave me alone, I'm O.K." Victim is in serious trouble — keep continuous watch over victim
- Lay victim down in bunk, wedge in place, elevate feet, keep immobile; no exercise
- Apply external mild heat to head, neck, chest and groin — keep temperature from dropping, but avoid too rapid a temperature rise.
- Transport soon, gently, to hospital

## CRITICAL CASES

- *Always assume patient is revivable* — don't give up — pulse very difficult to feel
- Handle with *extreme* care
- Tilt the head back to open the airway — look, listen and feel for breathing and pulse for *one to two full minutes*
- If there is any breathing or pulse, no matter how faint or slow, do not give CPR, but keep a close watch on vital sign changes
- Stabilize temperature with available heat sources, such as naked chest-to-back warming by other crew member (leave legs alone)
- If no breathing or no pulse for one to two full minutes, *begin CPR immediately*
- *Medical help imperative — hospitalization needed*

## WARNING

- First aid for severe and critical hypothermia is to add heat to stabilize temperature only. Rapid rewarming, such as a hot shower or bath, may be fatal; it will, at least, cause complications. Allow body to rewarm itself slowly.
- Body core temperature lags behind skin temperature during rewarming. Keep victim protected for extended period after apparent full recovery or medical help arrives. Many hours are required for return to normal temperature.
- Always assume hypothermia is present in *all* man-overboard situations in which the victim has been exposed for more than 10-15 minutes.
- Victims may also be suffering from near drowning, thus needing oxygen. Observe for vomiting.

F° 99.6°  
C° 37.6°  
NORMAL



97°  
36°  
MILD  
CONDITION



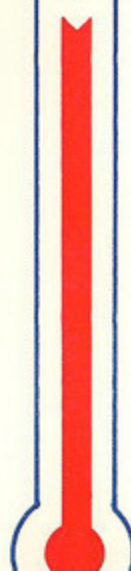
93°  
34°  
MODERATE  
CONDITION



90°  
32°  
SEVERE  
CONDITION



82°  
28°  
CRITICAL  
CONDITION



## What is Hypothermia?

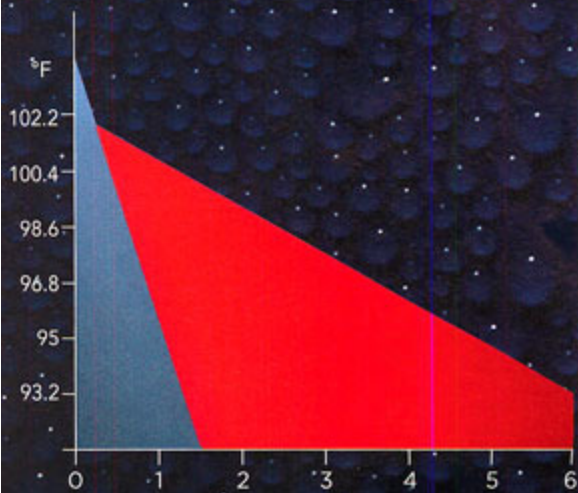
Hypothermia is defined as body temperature below 95.0 °F (35.0 °C). It is subdivided into four different degrees:

1. **Mild** 90°–95° F (32°–35° C)
2. **Moderate** 82°–90° F (28°–32° C)
3. **Severe** 68°–82° F (20°–28° C)
4. **Critical** at less than 68° F (20° C)

## Stages of Hypothermia



## Average Internal Temperature Levels in Calm Water of 50° F (10° C)



Information taken from the "Coleman Boating Safety" booklet  
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<http://www.uscg.mil/pvs/docs/Coldwater1.pdf>