

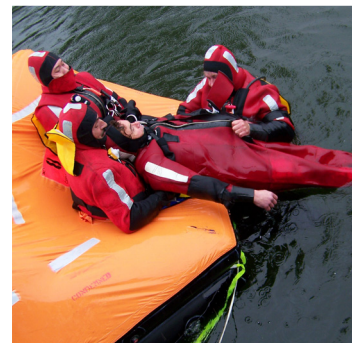
# COLD WATER SURVIVAL

Although most people never leave the dock thinking that they will end up in the water, it can and does happen—and in cold water, the consequences are life-threatening. Here are some simple ways to maximize your chances of survival.



## PROACTIVE: Before You Are In The Water

- Wear a life jacket or PFD to help keep afloat. This will help keep you from breathing in water during the Cold Shock Response and keep you afloat after Cold Water Incapacitation sets in.
- Wear Thermal Protection appropriate for the conditions. While some materials only provide thermal protection (e.g. a Paddling Dry Suit), the ideal is to wear something that provides both thermal protection and flotation.
- Carry a (portable) VHF radio or cell phone (if service is assured) so you can convey your location and your specific need for assistance to expedite rescue.



## REACTIVE: After You Are In The Water

- Try to get as much of your body out of the water as possible. If your boat is floating, climb onto the overturned hull or onto any other floating object, such as a cooler. Remember, our bodies lose heat 25 times faster in the water than in air of the same temperature.
- If you are by yourself in the water, adopt the H.E.L.P. (Heat Escape Lessening Position) to help insulate your torso from the temperature of the surrounding water.

If you are with others, huddle together, interlock your arms and legs, and press your torsos together for warmth.

In both cases, remain still. Movement will disturb the layer of water that is against your skin and heated by your body, and thereby increase the rate of heat loss.



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# REMEMBER 1-10-1 AND SURVIVE!

1-10-1 is a simple way to remember the first three phases of cold water immersion and the approximate time each phase takes. Times may vary based on body differences and water temperature, but just remember 1-10-1.

YOUR CHANCES  
OF SURVIVAL  
WITHOUT A PFD  
ARE LIMITED.

## 1 Minute to get your breathing under control

**Cold Shock Response.** An initial deep and sudden Gasp followed by hyperventilation that can be as much as 6-10 times greater than normal breathing. You must keep your airway clear or run the risk of drowning. The Cold Shock Response will pass in about 1 minute. During that time concentrate on avoiding panic and getting control of your breathing. Wearing a lifejacket or PFD during this phase is critically important to keep you afloat and breathing.

## 10 Minutes of meaningful movement

**Cold Incapacitation.** Over approximately the next 10 minutes you will gradually lose the effective use of your fingers, arms and legs for any meaningful movement. Concentrate on self-rescue initially, and if that isn't possible, prepare a way to keep your airway clear while you wait for rescue. Swim failure is one example of cold incapacitation, and will occur within these critical minutes. If you are in the water without a lifejacket PFD, drowning is likely.

## 1 Hour before you become unconscious due to hypothermia

**Hypothermia.** Even in ice water it could take approximately 1 hour before becoming unconscious due to Hypothermia. If you understand the aspects of hypothermia, techniques of how to delay it, self-rescue and calling for help, your chances of survival and rescue will be dramatically increased.

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