

# Cold Water Emergencies

By Conservation Officer Shannon Martiak



Charles Schug

Whether ice fishing on Lake Hopatcong, waterfowl hunting along Delaware Bay or hooking into some late season stripers along the coast, New Jersey offers great fall and winter hunting and fishing opportunities. With nearly 700 square miles of lakes, ponds, streams, rivers, bays and marshes in the Garden State, it's easy to find a great body of water for your favorite outdoor sport. Anytime you're on the water, though, plan ahead and be prepared for cold water emergencies.

## Cold Water Exposure

Surprisingly, cold water is defined as being 70 degrees F and below. The majority of New Jersey's waters are classified as cold water during much of the year. Hunters and anglers should make it a priority to be prepared for exposure to cold water. In the past two years, New Jersey has seen an increase in cold water-related fatalities, particularly waterfowl hunters. On a national level there are more waterfowl hunters killed

by cold water exposure than by gunshot wounds. These fatalities were caused by hypothermia and/or drowning.

## Hypothermia

Our bodies are heat-generating machines designed to maintain a near-constant core body temperature of 98.6 degrees F. A drop of just two degrees significantly impairs our motor skills. At 95 degrees hypothermia begins, a life-threatening drop in core body temperature. If left untreated, hypothermia can be fatal.

The risk of hypothermia can be greatly reduced by decisions made before venturing to the water or field. Choosing the proper clothing is the first step. A layered system of clothing consisting of a moisture wicking base layer, insulating mid layers and a wind- and waterproof top layer afford the best protection. Pay special attention to the head and neck as this is where a majority of the body heat is lost. Stay well-hydrated and eat high

calorie foods. Avoid alcohol as this negatively affects blood flow, accelerating the progression to hypothermia and can also compromise a person's ability to make rational, life-or-death decisions.

Recognize the signs of hypothermia: shivering, cold and sometimes painful and discolored extremities, slurred speech, drowsiness and/or irrational behavior. If these signs are present, heat loss must be stopped! If the victim is cold and *wet*, the wet clothes must be removed. Water conducts heat away from the body 25 times faster than air! Immediately, put dry clothes on the victim and take care with *slow* rewarming immediately. Handle the victim gently, as any sudden jarring could put an already unstable circulatory system into cardiac arrest. Finally, seek medical attention.

## Essential Equipment

One piece of equipment that could mean the difference between life and death is the personal flotation device (PFD). The PFD should be a high visibility color so rescuers can locate the victim from a distance. In addition to providing buoyancy, the PFD also provides an additional insulating layer to slow the loss of heat from your body should you fall into frigid waters.

## In the Water!

Should you find yourself through the ice, stay calm, keep your clothing on and zipped tight. Kick and pull to attempt to get yourself up onto the unbroken ice, then roll out of—and away from—the hole in the ice. Rolling distributes body weight over a much larger surface area than would walking, decreasing the likelihood of breaking through again. Then leave by walking the same path you took across the ice originally. **Most important:** seek immediate shelter, remove all wet clothes and begin rewarming *slowly*.

*When I venture onto ice, I wear a float coat and have ice awls attached to each wrist which makes them readily available. Ice awls consist of a shaft with a retractable spike that once jabbed into the ice, will provide you with a grip to pull yourself up and over the ice edge. A simple, inexpensive piece of equipment like this could save your life.*

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## Cold Water and Ice Safety Checklist

1. Itinerary – give to friends and family
2. Cell phone – in watertight bag
3. High-visibility float coat or personal flotation device (PFD)
4. Signaling device (flare, strobe, beacon, whistle)
5. Extra set of clothes – in a watertight bag
6. Ice Spikes or Ice Awls (see left)
7. Winter First Aid Kit
8. Throw bag and rope (see photo below)
9. Check weather forecast
10. Bring a buddy – don't go alone

Follow these guidelines if you go into cold water: Stay with the boat even if it has capsized. Grab hold of the hull and try to get out of the water. If the boat is not accessible, look for something to keep you afloat such as floating debris or your bag of duck decoys. If more than one person is in the water, stay together and keep your arms around each other to conserve heat. Use a signaling device (handheld flare, strobe light or whistle) which you should *keep attached to your PFD*.

If a victim is pulled from the water and no pulse is detected, immediately begin CPR. Countless stories are told of victims being revived through CPR after as long as 40 minutes in cold water. Do not give up!

To rescue someone who has fallen through the ice, *first* call 911, then recall the saying: *Preach, Reach, Throw, Row, Go*. **Preach** to the victim that help is on the way and reassure them that they must fight to stay alive. Attempt to **reach** the victim utilizing anything that can be extended to them, such as a long, sturdy branch. Next, attempt to **throw** something to the victim such as a rope or an empty, closed plastic jug with rope attached.

If a boat is nearby, **row** to the victim. If all else fails, the final consideration is to **go** out to the victim. Understand that going onto unstable ice is a difficult decision to make. Ask: will attempting to rescue this victim create another victim—you?

## No Ice is Safe Ice

There can only be guidelines as to whether ice is safe enough support your weight. Some say, “No ice is safe ice.” Water does not freeze uniformly. Underwater currents, obstructions, age of the ice and the presence of snow cover all contribute to ice formation and thickness. For clear, new ice, 6 inches is the accepted ice thickness

for safe foot travel. Remember to bring a measuring stick to determine the ice thickness at various locations.

A water-related accident can happen at any time, so be prepared, especially around cold water. By taking a preventative approach, having the proper equipment and identifying winter's dangers, you can enjoy a safe and rewarding outdoor winter experience. 🍷



## Coldwater Emergency Kit (clockwise from left):

Extra clothes in a watertight bag, first aid kit, strobe/beacon, ice awls, cell phone in a watertight bag, throw bag and PFD/float coat (center).

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