

Avoiding Hypothermia

Cold water is an unforgiving host for those who under-dress

The cooler months of the year are ideal for canoeing and kayaking. Paddlers are rewarded by clear skies, and absence of bugs, and uncrowded rivers, lakes, and shores. It's a time for observing migratory birds and watching the seasons change. But as the soft, warm air of summer begins to chill down, water temperatures also begin to drop. This can create a trap for the unwary.

Cold water pulls heat from the human body 25 times faster than cold air. In icy water a swimmer's body temperature drops precipitously in just a few minutes. A loss of only two degrees causes real discomfort; more than that results in a serious loss of strength, coordination, and judgment. In extreme cases the victim can slip into a coma and die! Despite a reduced number of boats on the water, most small craft accidents occur in spring and fall. These additional problems are caused by a lack of appreciation of cold water and its dangers. Here are some steps you can take to avoid off-season trouble.

First, learn to recognize when the water may be dangerously cold. Unlike rapids or ocean surf, dangerous water temperatures are not visible. On a warm, sunny day in late fall or early spring it may be hard to realize that the cold of winter lurks underneath your hull. One way to check the water temperature is to stick your hand in it for fifteen to thirty seconds. If it becomes numb, hurts, or loses mobility and sensation, your body will feel the same way during unprotected swim.

Second, wear appropriate protective clothing, such as a wetsuit or drysuit, any time the water temperature is below 50 degrees. Canoes and kayaks are tippy boats, and flipping over is part of the sport. When the air is warm, wear a vest or short-length 1/8" neoprene wetsuit underneath a paddling shell. As the temperature drops, full coverage becomes important. A wetsuit should cover the legs and torso, with a heavy pile sweater and paddle jacket to protect your arms. Pay particular attention to your extremities; icy

feet are a painful distraction, and cold hands may lack the strength and dexterity needed to handle a paddle effectively. In the spring and fall the weather changes fast. On borderline days it makes sense to carry extra gear along so you can wear it if needed.

Third, always wear your life jacket. Paddlers have enough to worry about in an emergency without trying to stay afloat, and tire out quickly in icy water. Putting one on after a capsizing sounds great in theory, but it's almost impossible in practice. A vest-type PFD adds considerable insulating ability as well as buoyancy. Both are important in the initial stages of a mishap, when confusion combined with cold-water shock results in many preventable drownings.

Fourth, avoid the use of alcohol and other mind-altering drugs. They make capsizing more likely by reducing coordination and judgment. Many substances also may render a user more susceptible to the cold. For example, in cold conditions the body reduces blood flow to the outer layers of tissue, concentrating heat in the interior. Alcohol makes your body feel warmer by dilating blood vessels, leaking warm blood from the inner core to the extremities. There is actually a net loss of heat. Other drugs numb a user's sensations so they don't realize how cold they are. Even tobacco, which reduces blood flow to the extremities, will make your hands noticeably colder.

Fifth, cold water demands extra caution. The more extreme the cold, the more careful you must be not to tip over. Sensible precautions include following the shore of the lake or ocean closely, waiting for the wind to die down before attempting a long crossing, or scouting questionable rapids. These are time-consuming procedures, so allow for this when making your plans. Daylight is shortened during the cooler months, so be sure to get an early start.

The sixth precaution is an old idea that

bears repeating: avoid boating alone. When you capsize, survival depends on getting out of the water as fast as possible. This usually requires outside help. A party of two is good; a group of three or four provides some welcome additional back up. Rescue techniques will vary depending on whether you're on a lake, ocean, or river. Each must be learned and practiced under controlled conditions before they can be executed successfully in an emergency.

Seventh, avoid extremes of water and weather conditions. Paddling on rivers at near-flood levels or lakes and oceans swept by strong winds and large waves is difficult enough under ideal conditions. Add unusually cold water and you have all the ingredients needed for an accident. The difference between taking a calculated risk and making a foolish mistake is in the quality of your information. Find out the weather forecast and expected water conditions for the area you are paddling, then modify your plans if necessary.

Lastly, learn to recognize and treat the symptoms of mild hypothermia. A person who is shivering uncontrollably, slurring their speech, or showing reduced physical skill and mental clarity is becoming chilled. This often occurs with someone pulled from the water after a long swim, and may occur after repeated immersions even when the paddler has state-of-the-art protective gear. Treatment involves rewarming: dry clothes, a fire, and hot liquids can effect miraculous changes in a short time, at which point the trip can be resumed. Sometimes an extra layer of clothes and vigorous paddling will be enough. But if a person is becoming help less or stuporous they are probably crossing over into severe hypothermia. This is a true medical emergency that paddlers must avoid at all costs. So get equipped, check the conditions, gather your group together, and enjoy!

--Charlie Walbridge