

## BE PREPARED—COLD WATER CAN KILL

Cold water is extremely dangerous. It quickly robs the body of its strength, diminishes coordination and impairs judgment. Immersion in water as warm as 50 to 60 degrees can initiate what has been called "Cold Water Shock."

When a paddler capsizes and is suddenly immersed in cold water, the body's first reflexive action is to gasp for air, followed by increased heart rate, blood pressure and disorientation. The immersion can even lead to cardiac arrest. Without proper equipment and apparel, the body can become incapacitated in just a few minutes. Without a lifejacket, this is a very dangerous and often fatal combination. When paddling where the water temperature is 60 degrees Fahrenheit or colder, a wetsuit is a must and a drysuit is highly recommended. This is also the case if the combined air and water temperatures are below 120 degrees Fahrenheit.

Cold water or cold weather can also lead to dangerous hypothermia. Hypothermia occurs when exposure to the elements prohibits the body from reheating and maintaining its core temperature. Typical symptoms of hypothermia include shivering, impaired judgment, clumsiness, loss of dexterity and slurred speech.

## CANOE-KAYAK-SUP-RAFT-RESCUE

The American Canoe Association (ACA) is a member-based nonprofit organization 501(c)(3) that promotes fun and responsible canoeing, kayaking, stand up paddleboarding, and rafting. Founded in 1880, the ACA actively advocates recreational access and stewardship of America's water trails. For more information and to become a member, visit [www.americancanoe.org](http://www.americancanoe.org).



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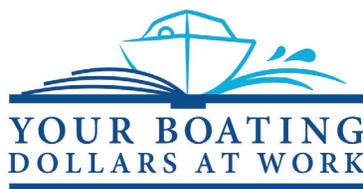
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# Cold Water Survival



Part of ACA's Paddle Safe - Paddle Smart Series

[www.americancanoe.org](http://www.americancanoe.org)

## PREVENT

### Plan your trip and “think smart”

Know the water temperature and weather forecast before you set out.

### Fuel Your Body

Keep your body well fueled with high carbohydrate foods and lots of water.

### Insulate Your Body

Simply said, you should dress for immersion in cold water.

Avoid wearing cotton clothing when paddling in cool temperatures.

Dress in layers using synthetic fabrics such as polyester fleece to prevent getting overheated or chilled from perspiration.

Carry a waterproof jacket designed for splash and/or rain protection.

Anytime the water temperature is less than 60 degrees Fahrenheit, wear specialized insulating clothing (wetsuit or drysuit) capable of protecting you while in the water.

Keep in mind that the warmth and comfort range of a dry suit can be flexible based on the clothing worn underneath it.

Wear a warm hat that will stay on your head in the water. A fleece-lined skullcap is ideal.

Have spare, dry clothing and store in a sealed dry bag while on the water.

### Watch Out for Your Group

Know your emotional and physical limitations.

Group members need to constantly assess the behavior of others in their group. Look for changes in behavior, withdrawal, sluggishness, talking less or a member not eating enough. These are all symptoms of fatigue and may suggest a problem that the group needs to address.

## ASSESS

The most typical symptoms of hypothermia (in order of onset) are:

- Shivering
- Impaired judgment
- Clumsiness
- Loss of dexterity
- Slurred speech
- Inward behavior
- Shivering stops
- Muscle rigidity
- Unconsciousness
- Death

## TREAT

### Mild hypothermia

*(victim shivering but coherent)*

\*If possible, take action before this stage. You may still have time to either stop the trip or take out early. Planning for an early take-out and/or shuttle half-way pays dividends.

Move victim to place of warmth. Remove wet clothing; give warm, sweet drinks (no alcohol or caffeine). Keep victim warm for several hours. The “window of opportunity” is closing fast. By this time you are already well on your way to experiencing hypothermia.

### Moderate hypothermia

*(shivering may decrease or stop)*

Victim may seem irrational with deteriorating coordination. Treat the same as mild hypothermia, but no drinks.

Victim should be kept lying down with torso, thighs, head and neck covered with dry clothes, coats or blankets to stop further heat loss. Seek medical attention immediately.

### Severe hypothermia

*(shivering may have stopped)*

Victim may resist help or be semiconscious or unconscious. Removed from water, victim must be kept prone, on back and immobile. Victim must be handled gently. Cover torso, thighs, head and neck with dry covers to stop further heat loss. Arms and legs must not be stimulated in any manner. Cold blood in extremities that suddenly returns to the core may induce cardiac arrest. Seek medical attention immediately.

### Victim appears dead

*(little or no breathing, no pulse, body rigid)*

Assume victim can still be revived. Look for faint pulse or breathing for 2 minutes. If any trace is found, do not give CPR. It can cause cardiac arrest.

Medical help is imperative. If pulse and breathing are totally absent, trained medical personnel should start CPR.

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