

YOU MUST FIGHT TO SURVIVE IN COLD WATER

MINNESOTA COLD WATER

Over 30 percent of boating fatalities in Minnesota happen in cold water with a victim not wearing a life jacket.

Falls overboard and capsizing are still the most common causes of boating fatalities in the state.

Falling into icy water can be deadly because many boaters do not think about the effects of cold water immersion.

Wearing your life jacket could be the single most important factor in surviving cold water.

Cold water immersion can kill in several ways, and most people die long before they become hypothermic.

COLD SHOCK RESPONSE

Within the first 2-3 minutes:

- Gasping, hyperventilation and panic.
- Drowning if not wearing a life jacket.

SWIM FAILURE

Within the first 30 minutes:

- Rapid cooling of arms and legs impairs the ability to keep the head above water.
- Effects occur regardless of swimming ability.
- Drowning if not wearing a life jacket.

IMMERSION HYPOTHERMIA

After at least 30 minutes of immersion:

- Cooling of the body's core temperature results in gradual loss of useful consciousness.
- Drowning if not wearing a life jacket.

If wearing a life jacket, the 1-10-1 principle may save your life:

1-10-1 Principle



1 Minute

- Get breathing under control.



10 Minutes of meaningful movement

- Assess the situation and make a plan.
- Perform most important functions first, such as locating other party members.
- Self-rescue if possible.
- Practice emergency communications and signaling.



1 Hour (or more) of useful consciousness

- Focus on slowing heat loss.



STAY WITH THE BOAT

If the boat capsizes or the victim falls overboard, stay with the boat and try to reboard.

- Most capsized watercraft will still float.
- A craft in the water is easier for rescuers to locate.
- If you have to remain in the water, do not attempt to swim unless it is to a nearby boat or floating object.
- Keep boots and clothes on. Almost all clothing will float for an extended period of time.
- While wearing a life jacket float on your back with your head and feet out of the water.

SLOWING HEAT LOSS

Reduce the effects of cold water immersion with the heat escape lessening position (H.E.L.P.).

- Cross ankles.
- Cross arms over chest.
 - Hands should be kept high on the shoulders or neck.
- Draw knees to chest.
- Lean back and try to relax.

Practice H.E.L.P. in a pool first, before depending on it in an emergency.

- If more than one person is in the water and all are wearing life jackets, the "huddle" is recommended.
 - This is where small groups of two to four "hug" with chests closely touching.
 - Arms should be placed around the backs of the others and kept underwater, while smaller individuals or children can be placed in the middle of the "huddle."
 - The huddle helps to conserve body heat and it is also easier for rescuers to locate than one lone victim.
- The close proximity of victims can serve also as a significant morale booster.

WHAT IS HYPOTHERMIA?

Hypothermia means the body is losing heat faster than it can produce it and body's core temperature drops below 95 degrees.

Falling into cold water can increase your chances of hypothermia.

Signs and symptoms of hypothermia include:

- Shivering.
- Slurred speech.
- Abnormally slow breathing.
- Cold, pale skin.
- Loss of coordination.
- Fatigue.
- Confusion or memory loss.
- Bright red, cold skin (infants).

TO CARE FOR SOMEONE WITH HYPOTHERMIA:

Signs and symptoms usually develop slowly. People with hypothermia typically experience gradual loss of mental acuity and physical ability, so they may be unaware that they need emergency medical treatment.

Call 911 or emergency medical assistance. While waiting for help to arrive, monitor the person's breathing. If breathing stops or seems dangerously slow or shallow, begin cardiopulmonary resuscitation (CPR) immediately.

Move the person out of the cold. If going indoors isn't possible, protect the person from the wind, cover the head, and insulate the individual from the cold ground.

Carefully remove wet clothing. Replace wet things with a warm, dry covering.

Don't apply direct heat. Don't use hot water, a heating pad or a heating lamp to warm the person. Instead, apply warm compresses to the center of the body — head, neck, chest and groin. Don't attempt to warm the arms and legs. Heat applied to the arms and legs forces cold blood back toward the heart, lungs and brain, causing the core body temperature to drop. This can be fatal.

Give the person warm beverages. Don't give the person alcohol.

Handle people with hypothermia gently. Don't massage or rub the person because their skin may be frostbitten, and rubbing frostbitten tissue can cause severe damage.

Body to body rewarming. In remote areas where assistance is delayed, practice "body to body" rewarming. Surround the victim with body heat in a sleeping bag, tent or other sheltered spot.

BE A SAFE BOATER



Wear a life jacket – Minnesota state law requires a wearable U.S. Coast Guard approved life jacket for each person on board a watercraft.

Prevent capsizing - Reduce speed in rough water, don't overload a boat, secure loads from shifting and adjust for changing conditions.

Prevent falls overboard - Remain seated while underway, avoid a sudden shift in weight.

File a float plan - Leave it with a responsible person. Include a description of your boat, names of passengers, boating location, time of return and description of your car and where it is parked. Tell the person to call 911 if you don't return at the expected time.

Brief passengers - Everyone should know where all safety equipment is (and how to use it), and how to start, stop and steer the boat.

Be prepared

Always wear a life jacket every time you step on a boat. Trying to put your life jacket on in the water is extremely difficult (if not impossible) and costs precious time and energy.

Carry a whistle or horn. Minnesota law requires a whistle or horn on all motorboats 16 feet or longer.

Keep an eye on the sky. No boater should ever set out in a storm.

Boaters should also:

- Carry a compass and chart.
- Carry a cell phone or two way VHF marine radio. The U.S. Coast Guard monitors Channel 16.
- Take a boater safety course.



COLD WATER KILLS

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