From The Transport Canada Safe Boating Guide

Surviving in cold water

It is a warm day — you are on your boat and get up to grab something. Suddenly you lose your balance and teeter off the side, falling into water that is less than 15°C. Your muscles are instantly paralyzed and there is no one around to help you.
You are experiencing cold shock. There is no time to figure things out.
Cold-water shock likely causes more deaths than hypothermia.
Canada's typically cold waters are especially dangerous if you are unexpectedly Immersed in them.
For three to five minutes after sudden immersion you will gasp for breath. You could also experience muscle spasms or a rise in your heart rate and blood pressure.
Worse yet, you could choke on water or suffer a heart attack or a stroke.
Even strong swimmers can succumb to the effects of cold-water shock.
Cold water can paralyze your muscles instantly.
Trying to get a hold of a device while in the water, let alone putting one on, will be nearly impossible because of the physiological changes your body will be experiencing. A lifejacket or personal flotation device (PFD) will keep you afloat while you gain control of breathing and prevent drowning from loss of muscle control.
Sadly, many people do not understand this danger and how to avoid it.
If you have survived the shock of cold water, hypothermia is the next danger.

Hypothermia is a drop in core body temperature below the normal level that occurs from a prolonged exposure to cold weather, particularly in water-soaked clothing or from direct immersion. At this lower temperature a person's muscle and mental functions are affected. Someone who is exposed to
cold water, and becoming hypothermic, can exhibit progressive signs and

Symptoms such as:

• Shivering, slurred speech and semi consciousness

• Slow and weak pulse, slow respiration, lack of coordination, irrational, confused and sleepy behaviour

• Weak, irregular or absent pulse or respiration

• Loss of consciousness

If you end up in the water, do everything you can to conserve energy and body heat. Swim only if you can join others or reach a safe haven. Do not swim to keep warm.

Extend your survival time by:

• Wearing a Canadian-approved lifejacket or PFD. Valuable energy will be lost keeping your head above water if you are not wearing one.

• Climbing onto a nearby floating object to get as much of your body out of or above the water as possible.

• If possible, adopt a heat escape lessening position: cross your arms tightly against your chest and draw your knees up close to them.

• Huddle with others and make sure the sides of everyone's chest are close together, with arms around mid to lower back and legs intertwined.

Protect yourself by wearing a lifejacket or PFD, multiple light layers of dry clothing and a water or wind-proof outer layer.

Other equipment that comes in a variety of styles and names, and provides Additional protection from hypothermia include:

• Floater or survival suits: a full nose-to-toes PFD

• Anti-exposure work suits: a PFD with a thermal protection rating

• Dry suits: to be used with a flotation device and a thermal liner

• Wet suits: to be used with a flotation device, traps and heats water against the body

• Immersion suits: to be used in extreme conditions when abandoning a vessel (usually for off-shore use)

Knowing how your safety equipment works, especially in water, is a good idea. Test it in a warm swimming pool or in calm water before you may have to use it in an emergency.

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