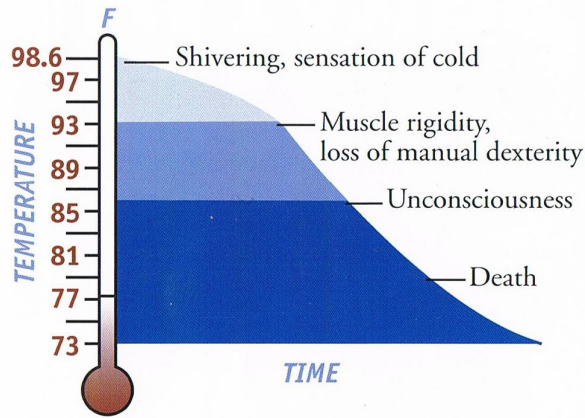


What is hypothermia?

Hypothermia is subnormal temperature within the central body. When a person is immersed in cold water, the skin and nearby tissues cool very fast. However, it may take 10 to 15 minutes before the temperature of the heart and brain begin to drop. When the core temperature drops below 90°F serious complications begin to develop. Death may occur at about 80°F. However, a person may drown at a higher temperature due to loss of consciousness or the inability to use his arms and legs.



How long can I survive in cold water?

Survival in cold water depends on many factors. The temperature of the water is only one. Others include body size, percentage of fat and type of activity in the water. People of larger size cool slower than people of smaller size.

By swimming or treading water, you will cool about 35 percent faster than if remaining still. Drown-proofing — the technique of staying afloat, facedown, with lungs full of air, and raising the head every 10 to 15 seconds for a breath — conserves energy, but also results in rapid heat loss through the head and neck. This technique reduces survival time by nearly one-half in cold water.

An average person, wearing light clothing and a personal flotation device (PFD), may survive 2.5 to three hours in 50°F water by remaining still. This survival time may be increased considerably by getting as far out of the water as possible and covering the head. Getting into or onto anything that floats may save your life. The following predicts survival times for an average person in 50°F water.

SITUATION	PREDICTED SURVIVAL TIME (hours)
No Flotation	
Drown-proofing	1.5
Treading water	2.0
With Flotation	
Swimming	2.0
Holding still	2.7
HELP	4.0
Huddle	4.0

What do I do if an accident occurs?

If you fall into cold water, remember that water conducts heat many times faster than air. Most boats will float even when capsized or swamped, so get in or on the boat to get as far out of the water as possible. Wearing a PFD is a must. It will keep you afloat even if you are unconscious. Remaining still and, if possible, assuming the fetal or heat escape-lessening posture (HELP) will increase your survival time. About 50 percent of heat is lost from the head. It is therefore important to keep your head out of the water. Other areas of high heat loss are the neck, groin and sides of the body.

If there are several people in the water, huddling close, side to side in a circle, also will help preserve body heat.

Placing children in the middle of the circle will lend them some of the adult body heat and extend their survival time.

HELP



HUDDLE



Note: It is impossible to assume the HELP position while wearing some PFDs. However, even a partial HELP position gives some protection to the high heat loss areas, thus increasing survival time.

Should I swim for shore?

This is a most difficult decision. It depends on many things. Experienced swimmers may be able to swim .8 mile in 50°F water before being overcome by hypothermia. Others may be able to swim 100 yards. Furthermore, distances on the water are very deceptive. Staying with the boat is usually the best thing to

do. This will make it easier for rescuers to spot you. Even a capsized boat is easier to see than a person in the water. Do not swim unless there is absolutely no chance of rescue and you are certain you can make it. If you do swim, use a PFD or some other flotation aid.

First Aid for hypothermia victims

1. Make sure the victim has an open airway and is able to breathe. Then, check for respiration and pulse. Respiration may be slow and shallow and the pulse may be very weak. So check these vital signs very carefully. If there is no pulse or respiration, CPR must be started immediately.
2. Prevent further heat loss:
 - a. Gently move the victim to shelter as rapidly as possible.
 - b. Gently remove all wet clothing; cut it away if necessary. The small amount of heat energy the victim has left must not be expended on warming and drying wet clothing.
 - c. Wrap the victim in blankets or a sleeping bag. If available, place warm water bottles or other gentle sources of heat under the blanket on the victim's neck, groin and sides of the chest.
3. Transport the victim to a hospital as soon as possible. Only a physician should determine when the patient should be released.

Giving CPR

Incorrect treatment of hypothermia victims may induce a condition known as after-drop. After-drop is a continued fall in the victim's core temperature even after he has been rescued. This is caused by improper rewarming, allowing cold, stagnant blood from the extremities to return to the core of the body. When this cold blood returns to the core of the body, it may drop the core temperature below a level that will sustain life. For the same reason, hypothermia victims must be handled gently and should not be allowed to walk.



Never:

- Place an unconscious victim in a bathtub.
- Give a victim anything to drink, including hot liquids and especially alcohol.
- Rub the victim's skin, particularly with snow.