



Marine Notice No. 05 of 2010

NOTICE TO ALL SHIPOWNERS, FISHING VESSEL OWNERS, AGENTS, SHIPMASTERS, PASSENGER SHIP MASTERS, SKIPPERS, FISHERMEN, YACHTSMEN AND SEAFARERS

SURVIVING COLD SHOCK/HYPOTHERMIA.

The Department of Transport wishes to advise people who find themselves in situations suddenly immersed in cold water or people who enter cold water to assist a person in distress that the following should be noted to better understand the process and increase awareness (in order to enhance their chances of survival).

It is important to note that you are not helpless to effect your own survival in cold water.

Any water below 15⁰C is classed as cold water.

A person who is not used to cold water, or not wearing suitable protective gear, and is suddenly immersed in such waters may become incapacitated and drown in the first two to three minutes.

COLD SHOCK/HYPOTHERMIA

The initial response after immersion in cold water is referred to as “Cold Shock”. The victim will feel some or all of the following symptoms:

- Initial deep gasping and uncontrollable rapid breathing;
- The rapid cooling of the skin after immersion causes a response almost immediately affecting circulation and breathing;
- The heart rate is increased, blood pressure is increased and the victim may experience violent shivering and great pain;
- Panic.

The above symptoms may be followed by the inhalation of water, drowning, stroke or heart attack.

BODY FUNCTION

The body consists of an inner core and an outer layer. The core temperature should be kept at an ideal 37⁰C. Blood vessels pick up the heat produced from food and exercise and distributes it throughout the body, automatically maintaining the core at 37⁰C. If the surroundings are cold, your body will narrow the blood vessels in the outer layer and keep that valuable body heat from being lost too rapidly.

When the body core temperature falls below 35⁰C, the person is suffering from hypothermia. At this stage poor coordination, numbness, disorientation and mental confusion are well established. Any further drop in core temperature will result in unconsciousness and death.

The body requires help to maintain its ideal temperature.

Heat loss by direct contact with cold water is twenty times faster than in air, and disturbed or moving water is more chilling than still water.

ACTIONS

Entering the water should be the last resort for seafarers who are abandoning their vessel and they should always be wearing a lifejacket.

Put on as many layers of warm clothing as possible, including foot protection, making sure to cover head, face, neck, hands and feet. Clothing to be fastened/buttoned to prevent cold water flushing through. If survival suits are carried, put it on over the warm clothing.

Try and enter the water gradually and if jumping into the water is unavoidable, you should try to keep your elbows to your side and cover your nose and mouth with one hand while holding the wrist or elbow firmly with the other hand. Avoid jumping onto the liferaft canopy. Do not attempt to swim unless it is to reach a fellow survivor or a survival craft.

After entry into the water, try and hold on to some support till the symptoms of Cold Shock subside (approx 2 –3 minutes).

To minimize heat loss you should float on your back, as still as possible. Legs should be together, elbows close to your side and arms folded across the front of your lifejacket. Keeping as much skin out of the water and huddling close to others will conserve body heat.

If it is the intention to return on board then a plan must be in place to facilitate this.

Precautions/preparations should be made before entry into the water. Hoists, winches or lifting davits, or on smaller vessels “Seattle Slings”, should be utilised to recover this person who will be partially or fully incapacitated and probably have to be lifted on board.

DROWNING

Drowning is not alone caused by submersion in water, it can occur when the airways are blocked by water preventing normal breathing, resulting in aspirating water. This may be caused by wave splash or intermittent submersion of the face due to ill-fitting PFDs.

The amount of water necessary to cause death by drowning is about three pints. Lesser amounts than this can also cause death.

BEST PRACTICE.

- Early alerting of emergencies should be done before the situation gets worse; the more notice time received the better the chances of a successful outcome.
- In order to avoid errors or misunderstandings, direct communication with a coast station is preferred.
- Seafarers must remember that they are responsible for their own safety and they must equip themselves for maximum survivability in the event of marine emergencies.
- A contingency plan to deal with emergencies should be developed and all crew should be familiar with their roles in the plan and be properly trained.
- Acquire knowledge through education at an approved training centre. Ensure that the vessel is equipped with the proper level of safety and survival equipment and it is regularly serviced and fit for purpose.

- The time of an emergency is not the time to learn.
- Keeping a positive attitude of mind and a strong will to survive will make a difference in enhancing survival.

This notice should be read in conjunction with:

- [Marine Notice No 16 of 2002](#) (Dangers of falling overboard etc).
- [Marine Notice No 28 of 2002](#) (The effects of Alcohol or drugs on Survival at sea).
- [Marine Notice No.36 of 2005](#) (Guidance on the use and periodic inspection of Inflatable PFD/Lifejackets).
- [Marine Notice No.18 of 2006](#) (Provision of crotch straps on Inflatable personal floatation devices),
- [Marine Notice No.23 of 2007](#) (Guidance on the selection of personal floatation devices (PFDs) for use on board pleasure craft)
- [Marine Notice No 50 of 2008](#) (Approved Training Course Providers under STCW 78/95).
- [International Maritime Organization](#) MSC.1/Circ.1185. (Guide for Cold Water Survival).

Director General
Maritime Safety Policy Division
Department of Transport
Leeson Lane
Dublin 2

16/02/2010

For any technical assistance in relation to this Marine Notice please contact
The Marine Survey Office, Leeson Lane, Dublin 2., tel: +353 1 678 3400
For information in relation to technical specification/type approval of radio equipment
contact the Radio Surveyors, tel: +353 1 678 2363/2364/2365/2367.
For general enquiries please contact the Maritime Safety Division tel: +353-1-678 3418
Any enquiries concerning Marine Notices should be addressed to:
Maritime Safety Directorate, Department of Transport, Leeson Lane, Dublin 2
Email: marinenotices@transport.ie or visit us at: www.transport.ie