

## COLD WATER EFFECTS

**1-10-1** is a simple way to remember how your body responds to cold water. There are three phases and 1-10-1 describes the duration of each phase. Understanding the effects of cold water on your body may save your life! Water is considered "cold water" if below 15C.



### 1 MINUTE - COLD SHOCK.

**FIRST** — A sudden and deep initial gasp.

**SECOND** — Hyperventilation: can be as much as 600-1000% greater than normal breathing.

- **Cold Shock will pass in about 1 minute.**
- Avoid panic.
- Keep your airway clear.
- Control your breathing.
- Wearing a life jacket is critically important to keep you afloat and breathing.

### 10 MINUTES - COLD INCAPACITATION.

- In about 10 minutes you will lose the effective use of your fingers, arms and legs. You will not be able to swim.
- Try to get as much of your body out of the water as possible in the first few minutes.
- Keep your airway clear and wait for rescue.
- **If you are in the water without a life jacket, drowning will likely occur.**

### 1 HOUR - HYPOTHERMIA.

- Even in ice water it takes around 1 hour before becoming unconscious due to Hypothermia.
- Your life jacket will keep you afloat even if you are unconscious - increasing your chance of survival.

Cold Water information courtesy of :

<http://www.coldwaterbootcamp.com>

Check it out for more info, tips and videos.



## DISTRESS PROCEDURES

### COASTAL: Marine Radio: Channel 16

(monitored emergency channel)

### INTERIOR: No specific channel monitored.

Here is an example of what to do if you are in distress. You may have to modify based on the equipment available and your location — coastal or interior.

1. Send a DSC (Digital Selective Calling) Alert (only available if the radio has a Distress Button) and you are located within VHF range.
  - Ensure radio switch is on.
  - Press and hold the distress button for 5 seconds.
2. Send distress call (Mayday) on **COASTAL**: VHF CH 16, if you are outside VHF range, use: 2182 kHz **INTERIOR**: Pre-determined in your Emergency Response Plan (ERP). Transmit the distress message:

**"MAYDAY MAYDAY MAYDAY"**

**"This is (vessel name)" - repeat 3 times**

**"MAYDAY"**

**"Vessel name "**

**Maritime Mobile Service Identity # (MMSI) (if known)**

**"Position"**

**"Nature of distress"**

**"Aid required"**

**"# of Passengers onboard"**

3. Activate EPIRB (Emergency Position Indicating Radio Beacon) or Personal Locator Beacon (PLB) if there is one on board.
  - **Activate EPIRB by following directions printed on the beacon body.**
  - **Take the EPIRB with you to the survival craft / life raft (if possible).**



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# Marine Passenger Safety Guide



**BC Forest Safety Council (BCFSC)**  
*Transportation Safety*

Toll Free : 1-877-741-1060

For more info and links visit:

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

*This document provides basic information for small vessel passengers and is intended for forest workers in BC. It should not be considered a replacement for any training programs or a pre-trip briefing. There is not enough information contained in this document to plan a marine vessel voyage. Please contact the BCFSC or Transport Canada for more info. Information Current to November 2015.*

## PRE-TRIP PLANNING

### Plan ahead!

- **W**eather - plan for all types of it!

Ensure you have appropriate clothing to stay dry and warm and make sure you have a hat, sun block and enough **water** in case it's sunny and hot!



- **H**ypothermia - make sure you know the signs, symptoms and how to treat hypothermia.

- **A**sk - your supervisor what you will do in an emergency; ask them about **survival kits** and who is responsible for bringing them along.

- **A**sk - your supervisor what 10 steps Transport Canada directs you to take, if you witness someone go overboard.

<http://www.tc.gc.ca/eng/marinesafety/debs-small-vessels-procedures-person-overboard-2996.htm>

- **C**heck in - know the procedure and stick to it! Who knows when you are coming back? Will they know what to do if you don't arrive on time?

- **K**now - where you are going! What is your destination, where did you start? Write down the coordinates. If you have a GPS - use it too!

- **K**now - how many people are on board! Find a buddy. Know where your buddy is at all times; watch out for each other. If there is an incident on board or if someone falls overboard you will be able to let others know and act quickly.

- **E**mergency Response Procedures/Plan - know what they are; ensure they are specific to the trip.



- **D**iscuss with your supervisor what **the PLAN** is, where it's written down, what gear you will need, how much it can weigh, how long you will be gone for and what you should generally expect.

## PRE-DEPARTURE BRIEFING

All passengers **must** be given a pre-departure safety briefing by the boat operator.

Make sure you understand, if you don't know **ASK!**

The briefing should include **instructions** related to:

- the vessel; area of travel;
- effects of your physical movements on the vessel;
- man overboard, emergency and fire procedures.

The **boat operator should identify**:

- name of the boat, how many passengers on board;
- off limit areas, potential hazards e.g. ropes, slippery surfaces, ignition sources, etc.

Before shoving off, **you should know**:

- **the PLAN**; communications procedures; emergency signals and procedures;
- the location of: muster stations; life buoys, fire safety equipment, first aid kits, flares and life jackets.

When loading, ensure equal weight distribution throughout. There must be at least one seat per passenger. Best practice is to remain seated while on route.

## LIFE JACKETS

Life jackets are the **most important tool** you have available to you in case of an emergency on the water! Ensure you know how to:



- put on the life jacket and do it up (there may be more than one type).
- inflate the life jacket, if it is an inflatable type.

There must be one life jacket, of a correct size, available for each person. Life jackets should not be worn or inflated inside a cabin or underneath a capsized vessel, debris or equipment. Check the condition of the life jackets prior to departure, check the expiry date (if there is one).

## SAFETY

**Make sure you know where the safety equipment is and how to use it!**

Know who the first aid attendants are; what is the chain of command if the operator is incapacitated. Would you be able to call for help if you were the only one on board? **Good Idea:** Read the emergency locator beacon before leaving.

### Equipment Examples

*Life-saving:* e.g. Life jacket, life raft, lifebuoys, or rope

*Fire and first aid:* e.g. fire extinguisher, first aid kit

*Vessel safety:* e.g. paddles, anchor, bailing buckets

*Distress alerting:* e.g. marine radio, locator beacon, flares



## YOU'VE FALLEN OVERBOARD

- **Remain calm!** Conserve energy.
- Look for a lifebuoy, there may be one close by.
- Turn your back to the waves.
- Keep your mouth and nose clear of spray.
- Conserve body heat - it is essential to survive.



1. Huddle with others and/or pull your knees up to your chest.
2. Climb up on the boat or debris to get as much of your body out of the water as possible.
3. Tighten up wrist, ankle and neck fastenings of clothing to reduce heat loss and hypothermia.