

#### FOLLOW UP:

- Prevent further heat loss (enclose in plastic bag)
- Monitor airway, breathing and circulation
- Move victim to shelter and lie flat
- Insulate body and specially the head
- Remove wet clothing if dry replacements are available.

## FACTS

- a) It takes only 15 to 30 minutes in cold water before the temperature of the heart, brain and internal organs begin to drop but skin and muscle temperatures cool far quicker, which may impair some essential early lifesaving actions.
- b) Swimming may give a feeling of warmth but it accelerates muscle cooling. The body may produce more heat when swimming but it is also more quickly lost from the arm and leg muscles. Once these muscles cool, swimming becomes more difficult or impossible.

#### IF NOT:

- Enclose body - except face - in large polythene bag or other waterproof material
- Give warm sweet drinks if conscious. DO NOT give alcohol
- Avoid rubbing the victims body



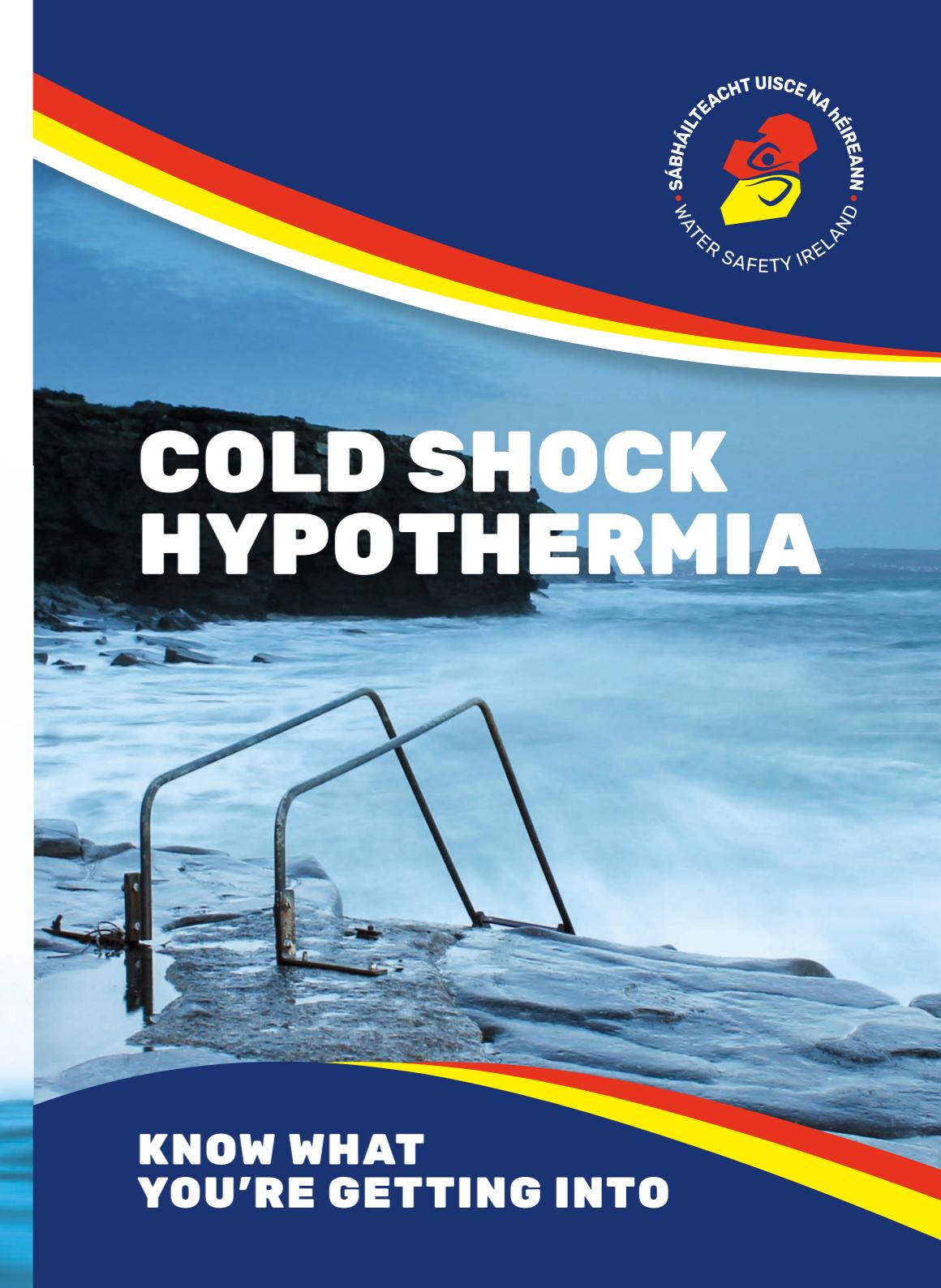
# CONSERVATION OF HEAT IN WATER

#### RETENTION OF HEAT IN WATER:

- 1) Avoid swimming if possible; floating or treading water increase the chances of survival. Remain still by using trapped air in clothes as a buoyancy aid. Better still wear a lifejacket.
- 2) Clothes will slow down the rate of loss of vital body heat.
- 3) Immersion Suits: Wet suits provide extra buoyancy and reduce heat loss for considerable time, but dry suits are better for long-term survival.
- 4) Use of floating objects (e.g. swamped or capsized boats) to get as much of the body as possible out of the water, even if the air feels colder you will always cool faster in water.
- 5) H.E.L.P (Heat, Escape, Lessening, Position) - This position (legs together elbows to sides), may be adopted if wearing a buoyancy aid. It helps slow body heat loss in calm water.



FOR LOTS MORE INFORMATION, VISIT:  
**[WATERSAFETY.IE](http://WATERSAFETY.IE)**



# COLD SHOCK HYPOTHERMIA

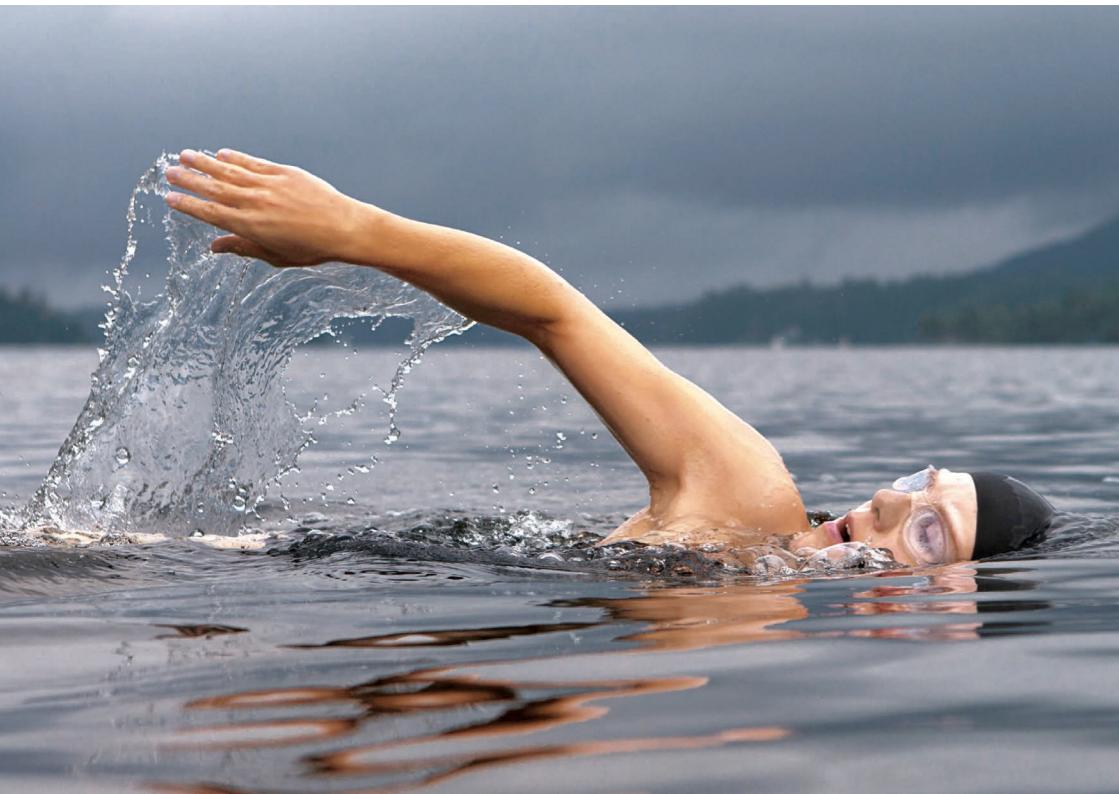
KNOW WHAT YOU'RE GETTING INTO

# INTRODUCTION

For people not used to cold water (temp.< 15°C), sudden immersion is associated with two problems, either of which may result in death from drowning.

On initial immersion, the shock of the cold water coming in contact with the skin ("Cold Shock") can result in incapacitation and drowning in the first 2-3minutes. For those who survive this and are unable to get out of the water quickly, progressive body cooling leading to hypothermia will follow in time. The rate of onset will depend on water temperature and the protective measures you have taken to reduce body cooling.

This pamphlet gives advice on how to prevent these conditions in the first instance and what to do if you do find yourself a victim of either.



# COLD SHOCK

The term used to describe the initial response of a victim, unused to cold water after sudden immersion.

## SIGNS AND SYMPTOMS:

- Initial deep gasping
- Uncontrollable rapid breathing, with possible dizziness and pins and needles
- Panic
- A large increase in both heart rate and blood pressure.

## PREVENTION:

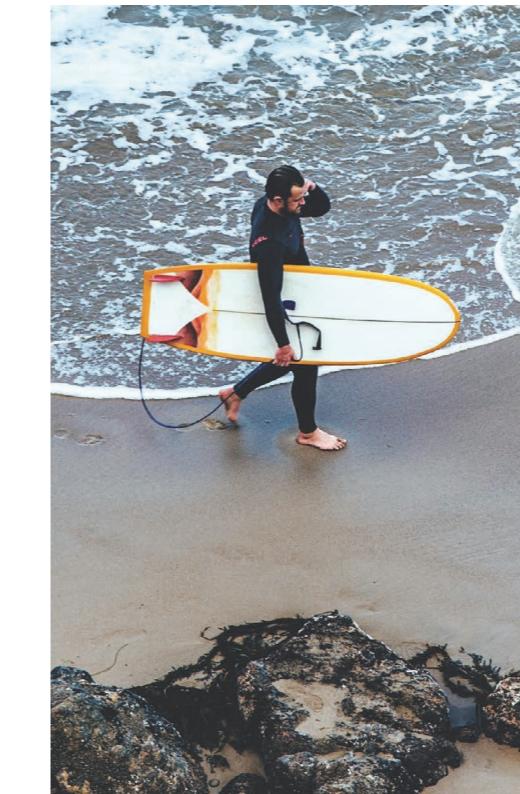
- Use recognised 'man overboard' prevention equipment
- Wear approved lifejackets.
- Wear clothing with good insulating and waterproofing properties.
- Hold on to some support and do not attempt to swim until symptoms have subsided (approx. 2 - 3 min)
- Wear Immersion Suits (dry/wet)
- Exit the water as soon as possible

## FOLLOW UP:

- Monitor airway, breathing and circulation
- Prevent further loss of heat
- Protect from wind
- Get medical help

## DANGERS:

- Inhalation of water
- Drowning
- Stroke or heart attack



# HYPOTHERMIA

Following immersion, first, the skin and limbs cool rapidly; then the heart, brain, and other deeper parts of the body cool.

Hypothermia occurs when deep body temperature drops by at least 2°C. Body build, body fat, fitness level and types of clothing worn, all affect its rate of onset.

## SIGNS AND SYMPTOMS:

- Early dulling of sensation in hands and impaired muscle function
- Violent shivering with blueness around the lips
- Armpits very cold
- Muscles stiffness
- Lethargy and disorientation
- Slow and laboured breathing
- Pulse weakens but difficult to feel in any case because of cold

## DANGERS:

- Impaired sensation and muscle coordination may impair some early vital lifesaving actions involving hands
- Loss of consciousness
- Drowning
- Cardiac arrest
- Death

**DO NOT ASSUME A PERSON IS DEAD;  
THEY MAY ONLY BE IN HIBERNATION.**

- Wear approved lifejackets.
- Wear Immersion Suits over warm clothing.
- Learn cold-water survival techniques (stay still with arms by sides and legs together - "HELP" position).
- Get out of water as soon as possible (life raft; upturned hull, or any other refuge in air)

