



Dangers of Dragging and other Safety Tips

Module 4

Learning Objectives

Rescue Swimmers will demonstrate knowledge and understanding of:

- the GASP reflex
- actions for the person in the water
- Instinctive Drowning Response (IDR)
- Physiological and Diminished Skilled Motor Performance Caused by Stress in Drowning
- Drag and Drowning



The Gasp Reflex



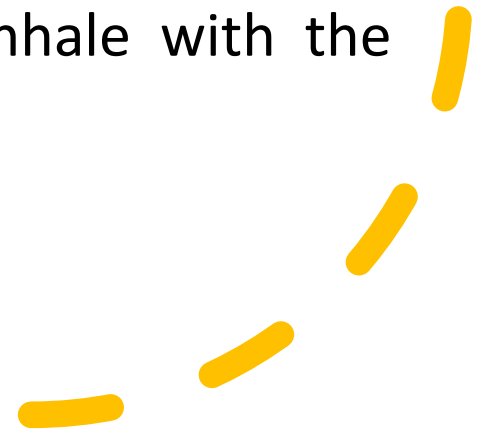
Gasp or Torso Reflex, Inhalation Response, or Cold-Water Shock.

Sudden immersion into water colder than 70 degrees F

Involuntary gasp sucking of water into airway and lungs.

Leads to laryngospasm and disorientation, panic, and the loss of any physical ability to swim or remain afloat.

Immersion into cold water with the face unprotected, the sudden urge to breathe deeply in response to the torso reflex may cause the person to inhale with the mouth underwater.



The Gasp Reflex Mitigation

Gasp/Torso Reflex:

- Fully cover your mouth and nose with your hand(s) prior to entering the water until surfacing.
- Lean backward, reduce facial contact.



COB Actions in the Water

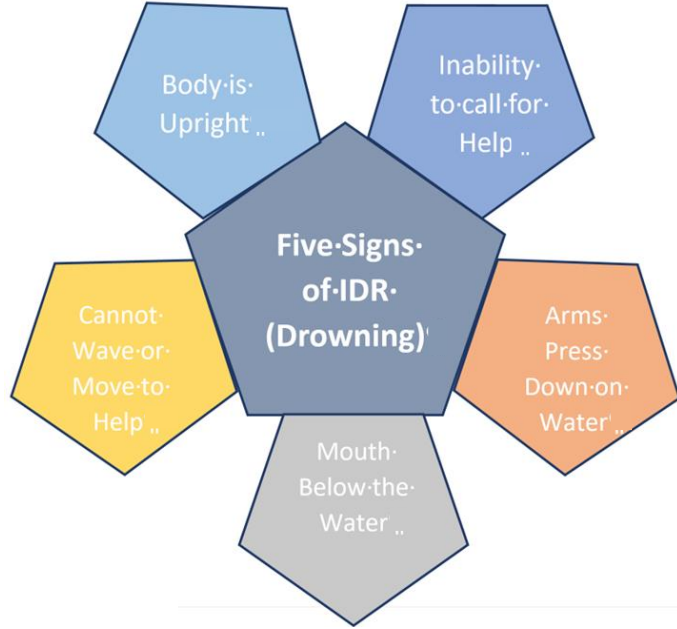
Step	Actions for the Person in the Water:
a	<p>Try to cover your nose and mouth prior to entering the water. Remember 1 - 10 - 1</p> <p>1 = One minute to control breathing</p> <p>10 = Ten Minutes until loss of some motor movement</p> <p>1 = One hour to Hypothermia</p>
1	<p>Upon surfacing, assess for injuries, if ok, try to wave single arm in the air (I am ok Signal), do a 360 search for hazards, boats, floatable devices, smoke etc. Be aware of other boats as many regattas have boats nearby and often directly behind you. Attach floatable devices together to expand the visual footprint in the water. LOOK for Smoke, Lights and COB gear and try move close to them.</p>



COB Actions in the Water

3x	If in darkness, point flashlight towards boat. This makes it easier for the boat to see the PIW. → Blow
	Whistle, Blow Whistle, Blow Whistle → Hail 16 on the radio. → Direct the boat as needed, deploy PLB, AIS etc. (Speak Slowly → maintain smooth breathing)x
...4x	Start to retain body heat ASAP, done spray hood. Assume heat position. Adjust vest accordingly (this may include releasing some air from vest), listen for whistles, horns engines, hails. → Remain calm and understand that even though boats may not be in sight they will be able to see your light and hear your whistle. (Use the H.E.L.P. Position → Taught in Safety at Sea)x
5x	Remain calm and listen for instructionsx
bax	When you need and/or stay afloat in the water for an extended time, do survival backstroke by floating on your back as you propel through the water. You use a simultaneous frog/breaststroke kick and a sculling motion with your hands. Your arms and legs move and come together at the same time. The main goal of the survival backstroke is to conserve energy and reduce heat loss.x





- 1. Inability to Call for Help**
- 2. Mouths Below the Water**
- 3. Can't Wave**
- 4. Can't Control Arms**
- 5. Body Upright**

United States Coast Guard



Five signs of (IDR) Drowning

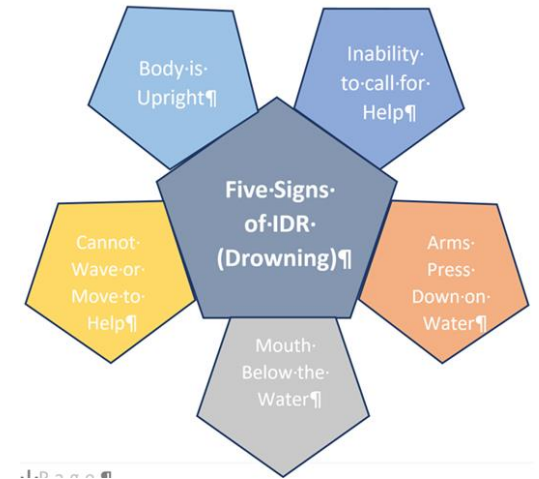
Instinctive Drowning Response (IDR)

Aquatic distress doesn't last long and does not always look the same.

In an IDR with:

- Head low in the water, mouth at water level.
- Head tilted back with mouth open.
- Eyes glassy and empty, unable to focus.
- Eyes closed.
- Hair over forehead or eyes.
- Not using legs – Vertical.
- Hyperventilating or gasping.

As soon as a person is nonresponsive to commands, assume they are in trauma and deploy the Rescue Swimmer. (Source: On Scene Magazine: Fall 2006 (page 14))



Physiological and Diminished Skilled Motor Performance Caused by Stress in Drowning

Acute stress to a person in the water or to a team mate on a vessel will negatively impact and/or influence:

- performance, decision-making, learning, and memory.

Physical reactions include:

- increased heart rate, blood begins to pool in the organs, fast and shallow breathing, narrow eyesight, fine motor movements and hyper focus on only one element.



Physiological and Diminished Skilled Motor Performance Caused by Stress in Drowning

A sailor who is suddenly in the water, this means opening a knife may be difficult because the hands may not have a normal blood flow.

Normal tasks may need extra time.

Tunnel vision may occur because of lower blood flow in the eyes.

The Rescue Swimmer and Team leaders should understand there are important ways to remotivate the PIW in order to help them, help themselves.



Physiological and Diminished Skilled Motor Performance Caused by Stress in Drowning

When diminished cognitive and motor movement ability is observed:

- 1) Call the Sailors Name and make them look you in the eyes,
- 2) using their name again say “Joe, I need you to _____”,
- 3) then remind the team of the task and sequence of the task.





Dragging and Drowning



Dragging and Drowning

COBs from the foredeck while the boat was sailing at around knots through the water.

The tether can hold the head face down.

Water would be channeled directly down the throat, drowning the casualty in a few minutes.



Dragging and Drowning

Training and Control for Drag and Drown Scenarios:
Quick Release Device on the Sailor end of the Tether – COB

Hook, Hoist and Cut

- 1) Identify the Rescue Halyard, free it.
- 2) Attach the halyard to tether at the jack line, pinch point
- 3) Hoist
- 4) Quick release or cut the jack line

