

Purpose

To provide all marine terminal personnel with the knowledge and procedures needed to respond **safely and effectively** to a **cold water immersion incident**, such as a **man overboard** or accidental fall into cold water during operations.

Why Cold Water Rescue Matters

At marine asphalt terminals, especially in **colder climates** or seasons, employees working on or near docks, barges, and vessels are exposed to **cold water hazards**. Even in water above freezing (50–60°F / 10–15°C), **cold shock, hypothermia, and drowning** can occur within minutes.

Risks of Cold Water Exposure

Temperature	Time to Exhaustion	Survival Time
50°F (10°C)	30–60 minutes	1–3 hours
40°F (4°C)	15–30 minutes	30–90 minutes
<32°F (0°C)	Under 15 minutes	<30 minutes

Immediate Dangers:

- **Cold Shock** (gasp reflex, hyperventilation)
- **Loss of muscle control**
- **Impaired decision-making**
- **Hypothermia**
- **Drowning**

Prevention First

1. PPE Requirements Near Water

- USCG-approved **Type I or III life vest** — mandatory at all times
- Cold weather **thermal layers**
- **Anti-slip boots**
- Harness and fall protection if working near unguarded edges or over water

2. Work Practices

- Never work alone near open water
- Maintain **clear walkways and dry surfaces**
- Always use designated **access points** and avoid jumping between dock and vessel
- Use **ladder access** instead of climbing structures or mooring lines

Cold Water Rescue Response

Step 1: Raise the Alarm

- Yell **“Man Overboard!”**
- Notify terminal control and activate **emergency response plan**
- Keep visual contact with the person — assign a spotter



STAGES OF COLD WATER IMMERSION

WEAR IT
A champion of the National Safe Boating Council

- 1. COLD SHOCK**
 - Gasp Reflex
 - Panic
 - Hyperventilation
 - Increased Heart Rate
- 2. MUSCLE FAILURE**
 - Loss of muscle coordination
 - Difficulty swimming, if you're able to swim at all
- 3. HYPOTHERMIA**
 - Body temperature drops to dangerous levels
 - 75% of victims don't survive to this point
- 4. RESCUE DANGERS**
 - Being removed from cold water can have short and long term effects on your body

Step 2: Throw Rescue Equipment

- Deploy a **life ring with retrieval line**
- Extend a **reaching pole or boat hook**
- If available, deploy a **rescue sling or throw bag**

NEVER jump in the water to attempt rescue unless you're specifically trained and equipped to do so.

Step 3: Use MOB Rescue Tools

- If working from a vessel or dock:
 - Use **fold-down rescue ladders**
 - Assist from above using **harnesses, rescue lines, or portable davits**
- Keep victim's head above water and bring them in **horizontally**

After the Rescue: Treating Cold Water Victims

Do:

- **Remove wet clothing** and wrap in dry blankets or clothing
- Move victim to **warm, sheltered area**
- Provide **warm (not hot) fluids** if conscious
- **Monitor breathing and consciousness**
- **Call EMS immediately**

Don't:

- Rub arms or legs — this can cause shock
- Use hot water, heating pads, or rapid rewarming
- Assume they're fine if they can speak — hypothermia can progress after rescue

Emergency Equipment Readiness

Ensure the following is available and inspected regularly:

- Life rings with lines
- Throw bags
- Cold water rescue ladder or platform
- Rescue sling or davit (if applicable)
- Thermal blankets
- First aid kits
- Dry suits or cold water PPE for trained responders

Final Reminders

- **Cold water kills fast** — prevention is your first line of defense
- Know your site's **emergency response plan** and **rescue equipment locations**
- If you're the rescuer, protect **yourself first**
- Always wear your **life vest**, even for short jobs

"The first minute is panic, the next 10 are critical — your preparation could save a life."



MAN OVERBOARD
ARE YOU READY FOR THE UNEXPECTED?

Are you ready?
Monthly practical MOB drills should be conducted with all crew, don't forget back to backs or relief crew.
Make sure all crew can perform all roles from manoeuvring the vessel to operating the MOB equipment.

Are your drills realistic?
Drills should simulate the actual emergency as close as possible, including the use of a realistic mannequin.

Are you efficient?
Cold water shock can kill, and time is of the essence, ensure your recovery is quick and efficient.

Is the equipment suitable?
MOB equipment should be suitable for the likely conditions and operable by the minimum crew, considering one person overboard.



