

HIGH RISK/LOW FREQUENCY

HUDSON FIRE DEPARTMENT

Standard Operating Guidelines

GUIDELINE NO: 300.11

SUBJECT: COLD WATER/ICE RESCUE

APPROVAL: Scott St. Martin, Fire Chief

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Revised Date: n/a

PURPOSE

This guideline establishes procedures for the members of the Hudson Fire Department responding to Cold Water/Ice Rescue incidents.

RESPONSIBILITY

1. All Chief and Company Officers have the responsibility to comply with and ensure that the personnel under their command are adequately trained, fully understand, and comply with this guideline.
2. All firefighters have the responsibility to learn and follow this guideline.

GUIDELINE

- A. Apparatus Response
 1. Squad 3162 – Minimum of 4 personnel
 2. Brush 8 - Minimum 2 personnel
 3. Additional apparatus as per Guideline 300.01
 4. Hudson EMS if not dispatched
 5. St. Croix County Dive Team
 6. Mutual Aid for special resources
- B. Assignments
 1. Enroute to the scene the personnel on Squad 3162 shall plan personnel assignments.
 2. Upon arrival four (2) personnel shall immediately don the ice rescue suits.
 3. All other personnel working on shore near water or ice shall don personal flotation devices (PFDs).
 4. A Safety Officer shall be immediately assigned to assist Command and oversee entire rescue operation.
 5. A Rescue Group Leader needs to be appointed to oversee the entire rescue operation and communicate with Command.
- C. Rescue Process
 1. The cold water/ice rescue incident shall be conducted as follows:
 - a. Evaluate Scene Conditions
 1. Environmental conditions
 2. Assess victim condition
 3. Interview witnesses
 4. Time incident occurred
 - b. Assessing Resources
 1. Number of personnel needed – 10 minimum
 - a. Command (1)
 - b. Safety (1)
 - c. Rescue Group Leader (1)
 - d. Rescue Team 1 (2)
 - e. Back Up Team 2 (2)
 - f. Rope Tenders (3)
 2. Equipment available
 3. Available personnel and their level of training

- c. A risk/benefit analysis shall be conducted. Develop an operational plan using the **SANE** approach.
 1. **S**imple step-by-step approach
 2. **A**lways have adequate back up
 3. **N**ever take chances
 4. **E**liminate the “beat the ice” attitude
 - d. **Rescuer safety is the primary concern.**
- D. Operational Plan
1. Establish victim contact immediately.
 2. In communicating your plan use the memory aid **LOCATE**. **L**ogical **O**perations **C**ommunicated **A**ccurately To **E**veryone
 3. The operational plan is not static, but it is a dynamic management process:
 - a. Monitor scene conditions
 - b. Monitor victim’s condition
 - c. Monitor personnel and equipment
 - d. Contact additional resources if necessary

Remember: Everyone stays warm Everyone stays dry Everyone goes home safe

- E. Incident Command Responsibilities
1. The Incident Commander (IC) has five (5) major categories of operational plans to choose. They are listed in order:
 - a. **Self-Rescue Method:** After establishing the victim’s condition the IC can determine if the victim can perform a self-rescue.
 - b. **Reach Method:** The rescuer extends some item for the victim to grab; or uses a device that will ensnare or grasp the victim.
 - c. **Throw Method:** If the distance is too great to reach, a rescuer can throw something attached to a retrieval rope. The device can then be used to pull in the victim, or give the victim additional buoyancy to lessen the chance of drowning, whether attached to something or not.
 - d. **Row Method:** The rescuer uses a watercraft or special piece of aquatic equipment to reach the victim. The victim can then be brought into the craft or attached by a device to the craft for transport to safety.
 - e. **Go Method:** This is the one in which a rescuer must go to the victim’s aid (without a boat) and use the means at his/her disposal to remove the victim from the danger of the broken ice and frigid water. In all cases a rescuer must be ready to “go”. To maximize safety in a go situation, the rescuer needs to be equipped with proper exposure protection, flotation and line attachment. A cold water/ice rescue suit is appropriate for this protection.
 1. One Person Rescuer:
 - a. The rescuer, dressed in a cold water/ice rescue suit, is attached to an anchored tethered line with a locking carabineer.
 - b. A figure eight on a bight is then tied in the line 18” away from the rescuer and another carabineer is placed in the loop. **Note – This system is pre rigged.** This is the line used to secure the line around the victim. The other end is secured to shore or an ice screw.
 - c. Any rescuer who is donning an ice rescue suit should carry ice awls.
 - d. As the primary rescuer begins crossing the ice, he/she shall crouch and shuffle.
 - e. As the rescuer approaches the victim, they can anticipate that the ice will be weak, as the ice did not support the victim’s weight. To compensate for the weaker ice, the rescuer shall begin to crawl toward the victim.
 - f.

- g. The rescuer begins to get closer; they should lie down, crawl or roll toward the victim, keeping the tethered line above the head. This will distribute the rescuer's weight and allow them to get closer to the victim without breaking through the ice.
 - h. If the carabineer is in the rescuer's right hand, they should approach the victim to the right to avoid line entanglement.
 - i. If the rescuer has to enter the ice hole, it should be from behind or beside the victim, reassuring the victim as you proceed.
 - j. The rescuer should try to enter the water feet first from a seated or prone position, to prevent air from getting trapped in the ice rescue suit.
 - k. The sling or rope then can be placed around victim. The victim should then be assisted out of the water and gently pulled/moved to shore.
 - i. When the rescuer is using the rescue sling, the procedures are as follows:
 - 1. Rescuer reaches through the rescue sling and grasps victim's closest hand firmly, while placing the sling over the victim's shoulder.
 - 2. The rescuer then slides the sling over victim's head then brings victim's other arm through the sling.
 - l. Rescuers shall use the following hand signals to communicate with rope tenders
 - i. Tap hand on head to begin pulling victim out of water and off ice
 - ii. Hold hand up palm forward to stop pulling
 - iii. Wave hand back and forth to indicate there is a problem and additional help may be necessary
 - m. Caution should be taken in preventing any further injury when moving the victim to safety. Sudden movement and undue activity can cause further medical problems.
 - n. Once safely on shore the victim shall be turned over to EMS personnel.
 - 2. The other personnel in the other cold water/ice rescue suit shall be the back up team/rapid intervention rescuers.
 - 3. At least one of the back up/rapid intervention rescuers shall be tied to a separate line and be ready for deployment.
 - 4. The rest of the back up/rapid intervention rescuers will be deployed based on the needs assessed by the Incident Commander.
 - 5. An adequate number of rope tenders shall be wearing PFD's. The Incident Commander and Safety Officer shall determine the adequate number of rope tenders.
 - 2. The remaining personnel on scene shall remain on shore away from the ice or water.
 - 3. They may want to be wearing PFD's; if there is any left, so they could act as relief to the rope tenders.
- F. Training
- 1. Ongoing training is necessary in this specialized field to remain proficient.
- G. Equipment
- 1. The equipment shall be inspected and maintained per the manufacturer's specifications.
 - 2. All equipment shall be inspected before and after each use.
 - 3. All equipment with any damage or defects shall be immediately removed from service and reported to the Maintenance Chief or Fire Chief.

References – *The Ice Rescue Handbook, Professional & Practical* – Larry and Susan Atlas, Risk and frequency classification information - <http://firefighterclosecalls.com/sopsog.php>