

Appendix B-14
Outreach/ Regional
Rehabilitation and Medical Evaluation Procedure

Purpose:

1. To ensure that the physical and mental condition of personnel during training exercises is at an optimal level to maintain the safety and well-being of each person individually as well as all participants and instructors.
2. To establish the procedure to be followed when initiating a formal Rehabilitation Station.
3. To establish the procedure to follow for unplanned rehabilitation efforts and medical evaluations.

Definitions:

1. EMS Provider- New York State Certified Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), or Paramedic.
2. End-of-Service Time Indicator (EOSTI, also Low Air Alarm) – Warning device that alerts the user that their SCBA is about to reach its limit and that it is time to exit the contaminated atmosphere. Its alarm may be any combination of visual, audible, or tactile.
3. Lead Instructor – SFI, CFI, MFI, FBTI authorized to deliver OFPC courses.
4. OFPC Course Facilitator- On site, OFPC full time staff assigned to supervise the delivery of the training course.
5. Medical Evaluation – Formal, direct observation of personnel at a Rehabilitation Station by the on-scene EMS provider. Medical evaluation is a mandatory element at all Rehabilitation Stations.
6. OFPC Staff (also Staff) – OFPC employee in the job title series of Fire Protection Specialist.
7. Program Manager – The full-time Fire Protection Specialist responsible for the administration of a training program, including scheduling instructors and/or assigning instructor responsibilities.
8. Rehabilitation (also Rehab) – An intervention intended to provide rest, re-hydration, nutritional support, and medical evaluation and/or assistance of personnel.
9. Rehabilitation Station – The location where rehabilitation takes place.
10. Rehabilitation Manager – The EMS provider assigned responsibility to manage rehabilitation.

Responsibilities/Job Duties:

The following responsibilities and job duties shall be incumbent upon each person.

1. Responsibilities of Lead Instructor/ OFPC Course Staff Facilitator
 - a. If a Safety Officer is required for the unit, these duties may be delegated to the individual assigned to fill that role.
 - b. Obtain a weather report, including heat index and wind chill index (as applicable) for the location and day of the training evolution. Refer to OFPC "Severe Weather/Heat Stress Policy" as needed, or if local policy meets or exceeds this policy follow those specific procedures.
 - c. Determine need for rehab in accordance with factors outlined below.
 - d. Ensure that appropriate numbers of qualified EMS providers are on site for scheduled course units that involve training evolutions as described in the respective course instructor handbook/ lesson plan. Minimally one, two are preferred.
 - e. Communicate the rehab plan and procedures to all personnel involved in the training exercise.
 - f. Prior to training commencing, brief all training participants on their responsibilities as outlined below, as well as informing them of the rehab plan in place.
 - g. Ensure appropriate reports are completed and notifications made, in accordance with this procedure.
 - h. After training concludes, brief all training participants about post-training recovery as outlined below.
2. Responsibilities of the Rehabilitation Manager
 - a. Determine the proper location(s) for the Rehabilitation Station(s).
 - b. Establish rehabilitation in the designated location(s).
 - c. Ensure that all personnel engaged in the training activity receive appropriate rest breaks, re-hydration, food, and care appropriate for the level of exertion, temperature and weather conditions encountered during the training.
 - d. Ensure appropriate reports are completed and notifications made, in accordance with this policy and the local/ County policies.
 - e. Maintain accountability of all personnel at the Rehabilitation Station.
 - f. Release personnel from the Rehab Station to return to or dismiss from training, or to EMS for further evaluation/treatment.

3. Responsibilities of Instructors

- a. When Rehab is required, integrate it into training activities, so that all personnel receive appropriate rest breaks, re-hydration, food, and periodic medical monitoring. Work with the Rehabilitation Manager to coordinate training activities with the rehab plan.
- b. Monitor weather conditions and the cumulative effect of working under those conditions on personnel.
- c. Adjust work and rest periods to compensate for the effects of extreme weather conditions on personnel to remain in compliance with the OFPC “Severe Weather/Heat Stress Policy” or local policy that meets or exceeds the requirements of OFPC policy.
- d. Ensure that personnel are properly clothed for extreme weather evolutions.
- e. Monitor SCBA air use of participants by checking air status at the start of each skill rotation. Those with less than half a cylinder of air remaining will change their cylinder if the skill station activity requires more than few breathes from the cylinder. If it is the student’s second cylinder, they will be sent to rehab after completion of the skill station.
- f. Monitor the condition of all personnel engaged in training and ensure that rehab is provided if needed.

4. Responsibilities of Participants

- a. Take care of yourself and take care of each other.
- b. Obtain proper hydration, nutrition, and rest to maintain normal body function.
- c. Watch each other for safety concerns including signs of mental and/or physical distress and suggest if fellow participants need to rest, cease activity, or seek medical attention and inform instructor of concerns.
- d. Participants shall advise an instructor, OFPC staff, or EMS personnel when they believe they are fatigued or exposed to heat or cold to a level that could negatively affect their abilities or the training operation they are involved with.
- e. When intense physical training is scheduled, engage in warm-up activities to help prevent injuries.
- f. Track air usage and time spent working to report to EMS personnel in rehab.

5. Responsibilities of EMS personnel

- a. EMS staff are provided by the local training center, county, or hosting agency
- b. When rehabilitation is initiated, perform and document baseline medical monitoring as described below prior to beginning of training. Use Appendix

A “Medical Monitoring and Rehabilitation Form” unless the local/ county Rehabilitation policy meets or exceeds this form.

- c. Observe training and the physical and medical condition of personnel, and advise personnel if they need to rest, cease activity, or seek medical care.
- d. Immediately advise the Lead Instructor/ OFPC course facilitator or Safety Officer if training needs to be halted due to a health or safety concern including the level of exertion, temperature and weather conditions encountered during the training.
- e. Provide EMS care in accordance with EMS local/ regional protocols.
- f. Document all care provided in accordance with this procedure and local/ county rehabilitation/ EMS protocols.

Initiation of Rehabilitation:

Rehabilitation shall be provided for as directed in course specific instructor guidance or commence whenever the physical or mental demands of a training exercise pose a potential safety or health risk to personnel. Rehabilitation Stations with medical evaluations *must* be provided when it is reasonably anticipated that any of the mandatory triggers for rehab listed below are likely to occur during a training evolution. Additionally, rehab *must* be provided for all interior live fire evolutions. For all other training evolutions that do not meet the mandatory criteria for rehab, due regard shall be used when making the determination to initiate formal rehabilitation and shall minimally include the following factors:

1. Duration of the training evolution.
2. Duration of consistent intense physical training (i.e., consecutive days of high intensity training).
3. Weather conditions.
4. Training evolutions requiring use of an SCBA.

Mandatory triggers for rehabilitation of training participants shall include the following:

1. The depletion of an SCBA cylinder to a point where the EOSTI activates, or an equivalent volume of air from one or more SCBA cylinders, within a 2-hour timeframe.
2. Following 40 minutes of intense physical training without an SCBA. This can occur during a single training evolution, or during multiple training evolutions within a 2-hour timeframe.
3. At any point during training that the participant, an EMT, or instructor deems it necessary.

Mandatory triggers for rehabilitation of instructors and OFPC staff include all the conditions above, as well as the following additional condition:

1. Following 2 hours of instructing live fire training while wearing structural turnout gear and SCBA.

When any of the mandatory triggers for rehabilitation listed above are met, the training evolution may continue to its completion prior to initiation of rehabilitation. However, after completion of the in-progress training evolution, an individual having met a mandatory trigger for rehab may not have additional work assigned to them or be directed to participate in a new training evolution until that person has been provided rehab.

Rehabilitation Procedure (unless the local or County procedure meets or exceeds these objectives):

1. Baseline Medical Monitoring
 - a. When a Rehabilitation Station is established, the Rehabilitation Manager shall ensure that baseline vital signs and a health evaluation are obtained by EMS personnel before the commencement of training and documented using Appendix A “Medical Monitoring and Rehabilitation Form”. These forms will then follow the participant through the entire training program.
 - b. After extended breaks on multi- unit training days (i.e., lunch or dinner break) a second health evaluation and baseline vitals may be obtained prior to the resumption of training when deemed necessary. If any instructor, participant, or EMS staff have concerns for the health and safety of personnel and feel that a second health evaluation should be conducted, then the second health evaluation must be performed.
2. Rehabilitation Station
 - a. The ideal Rehabilitation Station has the following attributes:
 - i. Protected from the environment, providing shade and cooling in hot conditions and warmth during cold conditions.
 - ii. Large and readily accessible to transporting EMS units.
 - iii. Separated from area used for donning and doffing SCBA/PPE.
 - b. Hydration and nutritional resources may include, but are not limited to:
 - i. Fluids - water, electrolyte drink
 - ii. Food - fresh fruit, sport nutrition gels and bars, warm broth

*Students may be required to bring their own fluids and food
 - c. Warming Resources may include, but are not limited to:
 - i. Blankets
 - ii. Dry towels
 - iii. Hot packs
 - d. Cooling resources may include, but are not limited to:
 - i. Cold packs

- ii. Misting fans
 - iii. Towels
 - iv. Pails of ice water for active cooling
- 3. Pre-entry Decontamination Gateway
 - a. For live fire training, personnel shall remove SCBA and turnout coats prior to entering Rehab. It is preferred to doff PPE entirely prior to entering Rehab when possible. If turnout pants are not removed and cooling is needed, turnout pants should be unfastened and lowered while seated in the Rehab Station.
 - b. Field decontamination wipes will be provided to all personnel to remove as much contaminant from skin as possible prior to entry into the Rehab Station.
- 4. Medical Evaluation and Vitals Check (refer to local/ regional policies and EMS protocols)
 - a. Personnel requiring rehab must be provided a minimum of 20-minutes at a Rehabilitation Station.
 - b. All personnel shall have vital signs assessed by EMS personnel at least 2 times while in the Rehab Station with a minimum 10-minute interval. Vital signs shall be checked more frequently for any personnel exhibiting abnormal vital signs.
 - c. The following vital signs shall be checked for all individuals entering rehabilitation:
 - i. Heart rate and regularity
 - ii. Respiratory rate and normality
 - iii. Blood pressure
 - iv. Pulse oximetry (include carboxyhemoglobin level for live fire when equipped)
 - v. Body temperature (when equipped)
 - d. A general visual assessment, which may include a focused physical exam, should also be performed as part of the medical evaluation.
 - e. Health evaluation should include checking for:
 - i. Chest pain
 - ii. Dizziness
 - iii. Shortness of breath or difficulty breathing
 - iv. Weakness
 - v. Nausea or vomiting
 - vi. Headache
 - vii. Cramps
 - viii. Symptoms of heat or cold related stress
 - ix. Changes in gait, speech, or behavior

- x. Altered mental status
 - f. If any of these symptoms are present, personnel shall be referred to EMS for further assessment and possible transport. This list of symptoms is not exhaustive and shall not replace good judgement, experience, or training of EMS personnel.
 - g. If EMS care beyond assessment is initiated, the Rehab Manager shall notify the Lead instructor/ OFPC course facilitator, and the Safety Officer (if designated). Training MUST be suspended if all on-duty EMS personnel, including the Rehab Manager, are in direct patient care roles and therefore not available to manage the Rehab Station.
 - h. Once an individual has been in rehab for a minimum of 20 minutes, the persons disposition shall be determined to be one of the following:
 - i. Released from Rehab.
 - ii. Designated to remain in Rehab Station for continued monitoring.
 - iii. Transferred to EMS for treatment and possible transport.
 - i. The “Medical Monitoring and Rehabilitation Form” shall be completed in full for each person. At the end of the training event the form will be returned to the training participant.
 - j. Non-EMS personnel may assist in the Rehab station but may NOT provide medical assessment/ vital sign monitoring.
5. Post-training Recovery
- a. The Rehabilitation Manager and Instructors will remind participants of the following concerns after any training evolutions necessitating a Rehab Station:
 - i. Personal hygiene to remove contaminants.
 - ii. Rest.
 - iii. Hydration and caloric replacement.
 - iv. Self-evaluation and observation of other participants for long term symptoms following training.

Spontaneous Rehabilitation:

Rehabilitation can be spontaneously initiated for personnel if deemed necessary by any participant, instructor, or EMS personnel. In these instances, all Rehab efforts should provide the key elements of a formal Rehab Station, including relief from the environment, rest and recovery, active or passive cooling or warming, as well as rehydration and nutritional support. After initiation of Spontaneous Rehabilitation, the on-duty EMS personnel shall be alerted, medical monitoring initiated, and any medical treatment or transport commenced if indicated.

Further Considerations:

1. During training, one station within a multi-station rotation may be the Rehab Station. However, personnel must be sent to Rehab immediately if they meet any of the conditions outlined above (SCBA cylinder usage, duration of work, etc.).
2. Passive cooling can be employed to reduce heat stress. These techniques could include site management and incorporating an air-conditioned area for a Rehab Station.
3. Active cooling techniques may include forearm immersion, misting fans, and cold towels.
4. Active warming techniques may include use of hot packs and warmed blankets.

References:

The following references were utilized in the formulation of this procedure or are referenced within the procedure itself.

1. OFPC "Live Fire Training Policy"
2. OFPC "Severe Weather/Heat Stress Policy"
3. NFPA 1403 "Standard on Live Fire Training Evolutions"
4. NFPA 1584 "Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises"
5. US Fire Administration, "Emergency Incident Rehabilitation"