

EMERGENCY INCIDENT REHABILITATION

Purpose: To ensure that the physical and mental condition of firefighters and paramedical personnel operating at the scene of an emergency incident or training exercise do not deteriorate to a point which affects the safety of each member or that jeopardizes the safety and integrity of the operation.

Policy/Procedure: This procedure shall apply to all emergency operations and training exercises where strenuous physical activity or exposures to heat or cold exist.

A. Responsibilities:

1. **Rehab Officer** – A Paramedic should be designed as “Rehab Officer”. This individual shall have no other assigned responsibilities and report to the Incident Commander or his/her designee.
2. **Rehab Team** – The Rehab Team should be comprised of sufficient paramedical personnel to perform monitoring, vital signs, rehydration, and manage food and medical supplies for the maximum number of personnel anticipated to be in the Rehab Area at any given time.
3. **Incident Commander** – The Incident Commander shall consider the circumstances of each incident and make adequate provisions early in the Incident for the rest and rehabilitation of all personnel operating at the scene. These provisions shall include: medical evaluation, treatment and monitoring; food and fluid replenishment; mental rest; and relief from extreme climatic conditions and the other environmental parameters of the incident.
4. **Fire Chiefs** - All fire chiefs should maintain an awareness of the condition of each member operating within their span of control and to ensure that adequate steps are taken to provide for each member’s safety and health. The command structure should be utilized to request relief and the reassignment of fatigued crews.

5. **Personnel** – During periods of hot weather, members should be encouraged to drink water and activity beverages throughout the workday. During any emergency incident or training evolution, all members should advise their supervisor when they believe that their level of fatigue or exposure to heat or cold is approaching a level that could affect them, their crew, or the operation in which they are involved. Members should also remain aware of the health and safety of other members of the crew.

B. Establishment of the Rehabilitation Sector

1. **When to Implement** – The Incident Commander will establish a Rehabilitation Sector when conditions indicate that rest and rehabilitation is needed for personnel operating at an incident scene or training evolution. This determination should be made based upon (1) the duration of the operation, (2) level of physical exertion, and (3) environmental conditions, including temperature, humidity, and wind-chill factors. Additional guidelines include:
 - a. Heat stress index >90 degrees Fahrenheit
 - b. Wind chill index <10 degrees Fahrenheit
 - c. Personnel will utilize more than 2 air bottles, or will utilize SCBA for >45 minutes of work.
2. **Implementation** - It is recommended that an EMS unit not otherwise involved in emergency operations at the scene be established as the Rehab Unit. If required, an ambulance should be requested to the scene for this purpose. Except under extreme circumstances, this ambulance should not be used for patient transport.
3. **Location** – The location for Rehabilitation Area will normally be designated by the Incident Commander. If a specific location has not been designed, the Rehab Officer shall select an appropriate location based on the site characteristics and designations below:
 - a. It should be far enough away from the emergency scene that personnel may safely remove their SCBA and turnout gear, and that they are removed from the urgency of the incident.

- b. It should provide suitable protection from the prevailing environmental condition, i.e. during hot weather it should be in a cool, shaded area; during cold weather, it should be in a warm, dry area.
- c. It should be readily accessible by EMS units.
- d. It should enable members to be free of exhaust fumes from apparatus or equipment (including those involved in the Rehab Sector).
- e. It should be large enough to accommodate multiple crews, based on the size of the incident.
- f. It should allow prompt re-entry into the emergency operation upon complete recuperation.

C. Rehab Operations

- 1. **Resources** – The Rehab Sector officer should secure, via the Incident Commander (or Logistics Officer) all the necessary resources to properly supply the sector. These include:
 - a. Fluids: water, activity beverage, ice, hot/cold beverage cups, etc.
 - b. Foods: soup, broth, stew, hot cups, plastic spoons, etc.
 - c. Medical: Blood pressure cuffs, stethoscopes, oxygen administration equipment, cardiac monitor, thermometers (tympanic type recommended), IV solutions and supplies, Rehab Sector tracking forms, pens, clipboards, etc.
 - d. Miscellaneous: fans, tarps, electric smoke ejectors, heaters, floodlights, blankets, towels, area marking equipment, etc.
- 2. **Rotation of Personnel** – Companies will be assigned to the Rehab Sector by the Incident Commander. The Company Officer should advise the I/C when their personnel are in need of rehabilitation. The entire Company should be assigned to the Rehab Sector as a group.

Personnel should remain in the Rehab Sector for a minimum of 15 minutes before returning to duty, unless an urgent situation develops.

Personnel rotated to the Rehab Sector shall not leave until released by the Rehab Sector Officer.

- 3. Medical Evaluation** – A medical evaluation should be made of each member upon arrival at the Rehab Sector by EMS personnel. If the initial evaluation indicates conditions outside the parameters listed below, a second evaluation should be done following a 15 minute “cool-down” (or “warm-up”) period. If an evaluation remains outside the parameters for 2 rehab periods (30 minutes) the member will be removed for active status of the incident and transported to the hospital or employee health for more definitive evaluation and disposition.

The following are the parameters followed in evaluating members:

HEART RATE

<120 = within normal limits on arrival

<100 = with normal limits 15 minutes after arrival

If > 120 after 15 minutes check temperature

If > 120 following 30 minutes of rest, obtain EKG and transport to the hospital

TEMPERATURE

<101= within normal limits on arrival

>101 = monitor after 5 minutes until within normal limits

If 101 after 15 minutes, consider transport

RESPIRATIONS

<26 = with in normal limits on arrival

<20 = within normal limits 5 minutes after arrival

If > 26 after 15 minutes, consider transport

BLOOD PRESSURE

Systolic <150 Diastolic <100 = within normal limits on arrival

Systolic <150 Diastolic <100 = within normal limits after 15 minutes

If Systolic >150 or Diastolic >100 after 30 minutes, transport to hospital

SKIN CONDITION

May be flushed on arrival – should improve within 5 minutes of arrival

If skin remains flushed following 5 minutes of rest, re-check temperature

MENTAL STATUS

Should be alert, oriented on arrival

Any alteration of mental status, TRANSPORT

HISTORY/MEDICATIONS

Antihistamines may impair the body's ability to sweat

History of cardiac, respiratory, or hypertension should be considered when evaluating personnel

AT ANY TIME A MEMBER IS SYPTOMATIC, I.E. CHEST PAIN, NEAR SYNCOPE, SOB OR DYSPNEA, THEY SHOULD RECEIVE APPROPRIATE TREATMENT AND TRANSPORT TO HOSPITAL.

4. **Recovery** – Personnel in the Rehab Sector should maintain a high level of hydration. They should not be moved directly from a hot environment to an air-conditioned area. An air-conditioned area is acceptable after a cool-down period at ambient temperature with sufficient air movement and shade.
5. **Hydration guidelines** – During stress, personnel should consume at least one quart per hour of water, activity beverage or combination of the two. This applies to both hot and cold weather activities. Carbonated or caffeine beverages should be avoided. Rehydration beverages should be at or about 40 degrees F.
6. **Nourishment Guidelines** – Food should be provided whenever operations are engaged for three or more hours. This period may be shortened when operations extend during a normal meal time.

7. **Accountability** – Personnel should enter the Rehab Sector as a crew. The crew designation, names of members, times of entry and exit, and appropriate medical information should be documented by the Rehab Officer or his/her designee on the appropriate form. Crews should not leave the Rehab Area until authorized to do so by the Rehab Officer. The Rehab Officer will notify Incident Command when a company is ready for reassignment.

If a member requires transport to a medical facility, the Rehab Officer should notify the Incident Commander at once. This information should be relayed via a messenger, and should not be broadcast over the radio.

The Rehab Unit should not be used to transport any patients from the scene, except in the most extreme circumstances. If the Rehab Unit is used for transport, Command should request the response of an additional ambulance to take its place.

- D. **Cessation of Operations** – When the Incident Commander has determined that no further personnel will need to be rotated to the Rehab Sector, he/she should advise the Rehab Officer. The Rehab Officer should advise the Incident Commander when the last crew/patient has been discharged from the Sector.