

**CHAPTER II      Operations**  
**SUBJECT 2        Command**  
**TOPIC     5        Rehabilitation/EMS Stand-by**

**A.     PURPOSE**

1.      To establish a procedure to be used for the rehabilitation of members at emergency scenes.

**B.     POLICY**

1.      The Incident Commander should establish a formal Rehabilitation Area (Rehab) during the following situations:
  - a.      When a fire has reached the first 20-minute mark and there is still active fire.
  - b.      For 2 alarm or greater fires or any other incidents of long duration.
  - c.      Incidents involving extended physical labor (labor intensive), such as hazardous materials responses or multiple casualty incidents.
  - d.      Abnormally hot or cold weather. Rehab should be implemented anytime a heat emergency or heat alert is declared.
  - e.      The Incident Commander may implement Rehab any other time it is deemed appropriate
2.      The Incident Safety Officer shall ensure that Rehab is established as indicated above.
3.      Members reporting on the scene of **all** incidents will operate in one of the following three modes:
  - a.      Operating at the incident in a Sector or Group with their Company
  - b.      In the Rehab sector being medically evaluated and refreshed
  - c.      In Staging, before or after rehabilitation, standing by to be deployed at the incident or placed back in service.

**Operating outside the Incident Command System or self assigning without the knowledge of the Incident Commander will be a serious safety violation.**



**C.     OBJECTIVES**

1.     To prevent heat exhaustion, heat stroke, frost bite, and other climate related injuries
2.     To ensure fire fighters are physically capable of safely performing tasks at emergency scenes.
3.     To prevent fatigue related injuries caused by overworked and exhausted fire fighters.

**D.     SAFETY**

1.     Fatigued members are more injury prone, and many injuries are the direct result of exposure to temperature extremes. The Rehabilitation process is a measure taken to reduce injuries during incidents of long duration and extremes in the working environment.
2.     The Incident Commander shall evaluate the circumstances at each incident and shall, early in the incident, make adequate provisions for the appropriate rest, rehabilitation, and medical treatment of all members working at the incident scene.

These provisions shall include:

- a.    ALS stand-by team (MEDIC UNIT) for immediate triage and treatment of fire fighters and victims. A Medic Unit will be initially dispatched on all one-alarm responses and once there is confirmation of a working fire, a second Medic Unit will be dispatched.. (Duties of the EMS stand-by team are located in Section E.)
- b.    An ALS Supervisor (ALS-32, ALS-34, or ALS-35) will be dispatched on all one-alarm responses. The ALS Supervisor will set up, manage and be in charge of the Rehab Sector.
- c.    Consider the use of Salvation Army, American Red Cross, or other agencies for food and fluid replenishment
- d.    Consider the use of facilities and vehicles for relief from extreme climatic conditions or other environmental factors present at the incident. (Metro Bus or near-by public structure)



**E. EMS Stand-By at Fires and Other Labor Intensive Incidents**

**1. PURPOSE**

To ensure ALS medical treatment personnel are on the scene and properly equipped for the health and safety of fire fighters.

The primary purpose of the ALS resource is the immediate triage and treatment of injured and ill fire fighters (long falls, burns, cardiac arrest, chest pain, etc.) with the additional function to triage and treat, severely injured or ill victims of the incident.

**2. EMS ASSIGNMENT**

- a. An ALS Supervisor and a Medic Unit will be dispatched to all working fires and other labor-intensive incidents (hazardous materials, cave-in, confined space and other technical rescue incidents) for the primary purpose of standing by to immediately treat injured or ill fire fighters.
- b. The ALS Supervisor and Medic Unit will report to the Incident Commander with the appropriate equipment in a “stand-by” mode ready to assist an injured or ill fire fighter. (i.e. defibrillator, oxygen, bag-valve mask, etc)
- c. In the event the Incident Commander utilizes one of the Medic Units to treat a fire fighter or victim they should be immediately replaced by another Medic Unit.
- d. Medic Unit personnel shall be outside the fire zone in the Fire Perimeter Area. In the event of a high rise incident or large complex where the Medic Unit is required to stage in a forward location, the Medic Unit personnel shall wear the level of PPE required for that area.
- e. Medic Unit personnel shall be immediately available to the Incident Commander in the event a fire fighter needs medical attention. Rescue Unit personnel shall not perform fire-fighting functions (stretching lines, breaking windows, etc.), which may divert them from their primary function.



- f. In the event of a high-rise incident the Medic Unit stand-by team may be co-located with Interior Staging. This advanced location will require Medic Unit personnel to have access to full protective equipment prior to entering the fire building.
- g. In the event of a MAY DAY the Medic Unit shall be assigned to the rescue effort and report to a location in proximity to the exit of the injured fire fighter. The Medic Unit will operate under the command of the RAT Chief at this time. Medic Unit personnel shall monitor the RAT radio channel during the rescue effort. The Rescue Unit will not be utilized for any other function during a MAY DAY incident.
- h. The Medic Unit may be utilized for rehabilitation functions if the incident has deescalated and fire fighters are no longer working in potentially hazardous conditions.

**F. REHAB ASSIGNMENTS TO THE INCIDENT**

- 1. When a Rehabilitation Sector is established the following resources will be assigned initially:
  - a. An ALS Supervisor (ALS- 32, 34 or 35)– Rehab Sector Officer
  - b. On large or extensive incidents a Rehab Sector Chief will be assigned.
  - c. For extended operations, the Medical Director should be notified.

Note: An ALS Supervisor is unavailable, Dispatch should so advise the Incident Commander to determine if an additional Medic Unit should be dispatched to manage the rehab sector.
- 2. If additional resources are needed, depending on the size of the incident or other circumstances, the Rehabilitation Sector Officer shall request additional resources through the Incident Commander.
- 3. Resources that can be utilized:
  - a. Paramedic Engine Company(s)
  - b. Additional Medic Unit(s)
  - c. Transit Bus for shelter
  - d. Salvation Army or American Red Cross for fluid and food replenishment.

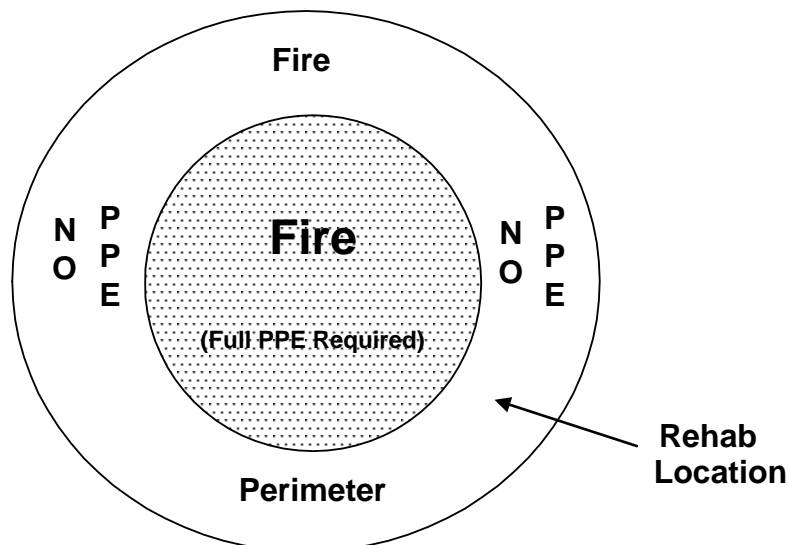


**G. PLACEMENT IN THE INCIDENT COMMAND SYSTEM ORGANIZATION**

1. The Rehabilitation Sector is usually placed under the Operations Section; however, it may be placed under the Logistics Section.
2. When Companies are sent to Rehab the Accountability Officer at the Command Post must be notified so their passports can be placed under the Rehab Section. After Companies are rehabilitated the Rehab Officer will advise Accountability that the Companies are now in Staging ready for reassignment to the incident.
3. When Incident positions are being phased out, or Companies are to be assigned after Rehabilitation, they are under the direct control of the Rehabilitation Sector Officer. The Rehabilitation Sector Officer will determine the time spent in Rehabilitation. The Rehabilitation Sector Officer will be in constant communication with Command and the Accountability Officer.
4. **Companies shall not self-assign from Rehab or leave Rehab without the knowledge and approval of the Rehab Sector Officer.**

**H. LOCATION**

1. Rehabilitation must be located in a safe area appropriate for the environmental conditions and the Incident Commander and the Accountability Officer must know the location.
2. The Rehabilitation Area must be located outside the immediate Fire Zone, but in reasonable proximity to the Command Post where the Incident Commander can get rehabilitated companies quickly redeployed back into the emergency scene. The location shall be in an area that does not expose companies to extreme environments or motor exhaust and can provide ample rest, limit stress, and reduce distractions from the incident scene.





3. Fire in multi-story buildings may require the establishment of an interior Staging area; in these cases the rehabilitation area may be co-located with interior staging.
4. In a Hazardous Materials Emergency the rehab area must **not** be located in the Red or Yellow Zones. Rehab should only be located in the Green Zone.
5. Consideration should be given to provide access for emergency medical personnel and vehicles.

#### **I. CLIMATIC CONDITIONS**

1. Climatic or environmental conditions that indicate the need to establish a rehabilitation section includes a **heat index** above 95 degrees F (heat alert or heat emergency) or a wind chill index below 20 degrees F.
2. A crucial factor in the prevention of heat stress injury is the intake of water and electrolytes during periods of intense physical activity. During periods of intense physical activity personnel should drink at least 1 quart of water or electrolyte replenishment beverage while in the Rehabilitation Sector.
3. Members in Rehab should not use caffeine and carbonated beverages because they interfere with the body's normal water conservation mechanism. Company officers shall ensure these items are not the primary fluids consumed during rehabilitation.
4. Members should not be taken from a high temperature environment and immediately placed in a low temperature environment because the body's cooling mechanism may shut down.

#### **J. DETERMINING REST PERIODS**

1. The Incident Commander is ultimately responsible for assigning personnel to the Rehabilitation Sector. The Incident Commander must ensure that adequate personnel are on the incident scene for relief so operations can continue while personnel rest and rehabilitate. The Rehab Officer will ensure appropriate rehabilitation procedures are followed and will communicate any resource requests to the Incident Commander.
2. Forty-five minutes of working time, in full-protective gear, is generally an acceptable level of work prior to mandatory rehabilitation.



3. Rest periods should last until normalization of vital signs.
4. Rest periods are dependent upon the present working environment and medical evaluation by the Rehab medical personnel. If an ALS Supervisor is not on the scene; the member in charge of the ALS Engine Company or Medic Unit managing rehab will determine appropriate rest periods.

**K. MEDICAL EVALUATION DURING REHABILITATION**

1. When arriving at the Rehabilitation Sector, members shall remove all protective clothing practical for the circumstances and have their vital signs monitored while resting and receiving fluid replenishment.
2. The following criteria is used in the evaluation of Fire Department personnel to determine release from Rehabilitation or if there is a need to transport for further evaluation:
  - a. The following vital sign parameters and assessment factors shall be used to release members from the Rehabilitation Sector:
    1. Systolic Blood Pressure less than 160mmHg
    2. Diastolic Blood Pressure less than 100mmHg
    3. Pulse rate less than 120
    4. Respiratory rate less than 24
    5. Temperature below 102°
  - b. Medical treatment and transportation to the hospital is required if an altered mental status is discovered during the rehabilitation process.
  - c. Screening body temperatures should be assessed by tympanic thermometer upon arrival in Rehab. If the body temperature is at or above 102 degrees F reassessment of body temperature should be performed after passive body cooling (removal of gear, fanning, cool water or mist application) If body temperature continues to remain above 102 or increases above 103, then further medical evaluation and transport are required.
  - d. Anytime personnel experiencing signs and symptoms of serious medical conditions (chest pain, shortness of breath, heat or cold exposure, etc) or have vital signs that are outside normal limits for any reason should be treated and transported for evaluation.



---

**L. TRANSPORTATION OF FIRE FIGHTERS TO THE HOSPITAL**

1. If immediate treatment or transport is needed then the on-scene Medic Unit will transport. The Incident Commander will immediately request the dispatch of another Medic Unit as stand-by.
2. Members with major trauma, severe burns, or cardiac arrest shall be transported to an appropriate facility. In outlying areas of the city Air Care may be utilized.
3. Members requiring transportation for evaluation, illnesses, or minor injuries should be transported to an appropriate medical facility as determined by the on-scene medical personnel or as requested by the member.
4. No member shall be permitted to be released from the scene without being evaluated and meeting acceptable levels of the parameters in Section J.

**M. INDIVIDUAL RESPONSIBILITIES**

1. During all operations, members are encouraged to drink water or an electrolyte drink replenishment mix throughout the work-day.
2. During incidents or training exercises, all members shall advise their supervisor when they believe their level of fatigue or exposure to the heat or cold environment is approaching a point that could affect them, their crew, or the operation in which they are involved.
3. Each member shall monitor other members during all incidents for signs of fatigue, illness, or injuries.
4. The Officer shall be held responsible for monitoring the personnel assigned to them. The Officer shall ensure that adequate steps are taken to provide for the members safety and health.
5. Company Officers shall ensure that the water coolers on their Companies are full and replenished with water and/or ice at the beginning of every shift.

**N. DOCUMENTATION**



- 
1. The “Time In” and “Time Out” of the crews entering the rehabilitation sector shall be documented.
  2. All medical findings **shall** be documented as described in Section K of this procedure.
  3. If medical treatment is required, then the appropriate medical run reports shall be completed on the fire fighter.
  4. The Incident Commander or ALS Supervisor shall complete injury Reports and Workers Compensation paperwork if medical treatment and transportation is required.
  5. All documentation forms shall be filled out by the ALS Supervisor and submitted to the Risk Management District Chief.