

General Order: **99-09**

Effective Date: August 31, 1999

Revision Date:

**City of Lancaster Fire Department
General Orders**

Title: Rehabilitation

Originator – Fire Chief (Signature/Date): _____

PURPOSE

To ensure that the physical and mental condition of members operating at the scene of an emergency or a training exercise does not deteriorate to a point that affects the safety of each member or jeopardizes the safety and integrity of the operation.

SCOPE

This procedure shall apply to all emergency operations and training exercises where strenuous physical activity, exposure to heat or cold, or adverse conditions exist.

RESPONSIBILITIES

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 members 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. The rehabilitation shall include the provision of Emergency Medical Services (EMS) at the Basic Life Support (BLS) level or higher.

Supervisors

All supervisors shall maintain an awareness of the conditions of each member operating within their span of control and ensure that adequate steps are taken to provide for each member's safety and health. The command structure shall be utilized to request relief and the reassignment of fatigued crews.

Personnel

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

ESTABLISHMENT OF REHABILITATION SECTOR

Responsibility

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. A member will be placed in charge of the Sector and shall be known as the Rehab Officer. The Rehab Officer will typically report to the IC or to the Logistics Officer in the framework of the incident management system.

Location

The Incident Commander will normally designate the location for the rehabilitation area. If a specific location has not been designated, the Rehab Officer shall select an appropriate location that will provide physical rest by allowing the body to recuperate from the demands of the operation.

Resources

The Rehab Officer shall secure all necessary resources required to adequately staff and supply the rehabilitation area. Items such as fluids, food, medical supplies, fans, blankets, etc., should be provided.

GUIDELINES

Rehabilitation Sector Establishment

Rehabilitation should be considered by staff officers during the initial planning stages of an emergency response. However, the climatic or environmental conditions of the emergency scene should not be the sole justification for establishing a Rehabilitation Sector. Any activity/incident that is large in size, long in duration, and/or labor intensive will rapidly deplete the energy and strength of personnel and, therefore, merits consideration for rehabilitation. Climatic or environmental conditions that indicate the need to establish a rehabilitation area are a heat stress index above 90°F or wind-chill index below 10°F.

Hydration

A critical factor in the prevention of heat injury is the maintenance of water and electrolytes. Water must be replaced during exercise periods and at emergency incidents. During heat stress, the member should consume at least one quart of water per hour. The rehydration solution should be a 50/50 mixture of water and a commercially prepared activity beverage and administered at about 40°F. Rehydration is important even during cold weather operations where,

despite the outside temperature, heat stress may occur during firefighting or other strenuous activity when protective equipment is worn. Alcohol and caffeine beverages should be avoided before and during heat stress because both interfere with the body's water conservation mechanisms. Carbonated beverages should also be avoided.

Nourishment

The department will provide food at the scene of an extended incident when units are engaged for three or more hours. A cup of soup, broth, or stew is highly recommended because it is digested much faster than sandwiches and fast-food products. In addition, foods such as apples, oranges, and bananas provide supplemental forms of energy replacement. Fatty and/or salty foods should be avoided.

Rest

The "one air bottle rule," or 30 minutes of work time, is recommended as an acceptable level prior to rehabilitation. In all cases, the objective evaluation of a member's fatigue level shall be the criteria for rehab time. Rest shall not be less than 10 minutes and may be longer as determined by the Rehab Officer. Fresh crews, or crews released from the Rehabilitation Sector, shall be available in the staging area to ensure that fatigued members are not required to return to duty before they are rested, evaluated, and released by the Rehab Officer.

Recovery

Members in the rehabilitation area should maintain a high level of hydration. Members should not be moved from a hot environment directly into an air-conditioned area because the body's cooling system could shut down in response to the external cooling. An air-conditioned environment is acceptable after a cool-down period at ambient temperature with sufficient air movement. Gas powered fans are not acceptable due to their production of exhaust fumes. Certain drugs impair the body's ability to sweat and extreme caution must be exercised if the member has taken antihistamines, such as Actifed or Benadryl, or has taken diuretics or stimulants. In all situations, the health and well being of LFD personnel is the controlling factor.

MEDICAL EVALUATION

Emergency Medical Services

Emergency Medical Services are provided and staffed by highly trained LFD personnel. They shall evaluate vital signs, examine members, and make proper disposition, (return to duty, continued rehabilitation, or medical treatment and transport to a medical facility). Continued rehabilitation should consist of additional monitoring of vital signs, providing rest, and providing fluids for rehydration. Medical treatment for members, whose signs and/or symptoms indicate potential problems, should be provided in accordance with local medical control procedures. EMS personnel shall be assertive in an effort to find potential medical problems early.

Heart Rate and Temperature

The following are conservative recommendations not based on any individual person. Remember to treat the person, not the protocol. When in doubt, refer to your medical protocol or medical control. The heart rate should be measured for 30 seconds as early as possible in the rest period. If a member's heart rate exceeds 110 beats per minute, an oral temperature should be taken. If

the member's temperature exceeds 100.6°F he/she should not be permitted to wear protective equipment. If it is below 100.6°F and the heart rate remains above 110 beats per minute, rehabilitation time should be increased. If the heart rate is less than 110 beats per minute, the chance of heat stress is negligible.

Documentation

All medical evaluations shall be recorded on standard forms (attached). The member's name and complaints must be included. The rehab form must be signed, dated, and timed by the Rehab Officer or his/her designee.

ACCOUNTABILITY

Members assigned to the Rehabilitation Sector shall enter and exit the rehabilitation area as a crew. The crew designation, number of crew members and the times of entry to and exit from the rehabilitation area shall be documented by the Rehab Officer or his/her designee on the Emergency Incident Rehabilitation Report. Crews shall not leave the rehabilitation area until authorized to do so by the Rehab Officer. All crews entering and leaving rehab shall carry their accountability system passport.