CARVER FIRE DEPARTMENT

Standard Operating Guidelines

Section 3.08 - Rehab **June 15, 2013**

1.0 PURPOSE

The purpose of this guideline is 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 that jeopardizes the safety and integrity of the operation.

1.1 SCOPE

This procedure shall apply to all emergency operations, training exercises, and other department events and functions where strenuous physical activity or exposure to heat or cold exists.

1.2 RESPONSIBILITIES

01. 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 for 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 other environmental parameters of the incident.

02. Officers

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

03. 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 Officer when they believe that 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.

1.3 ESTABLISHMENT OF REHABILITATION SECTOR

01. 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 Safety Officer or the Incident Commander.

02. 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 based on the site characteristics and designations below.

03. Site Characteristics

A. It should be in a location that will provide physical rest by allowing the body to recuperate from the demands and hazards of the emergency operation or training evolution.

B. It should be far enough away from the scene that members may safely remove their turnout gear and SCBA and be afforded mental rest from the stress and pressure of the emergency operation or training evolution.

C. It should provide suitable protection from the prevailing environmental conditions. During hot weather, it should be in a cool, shaded area. During cold weather, it should be in a warm, dry area.

D. It should enable members to be free of exhaust fumes from apparatus, vehicles, or equipment (including those involved in the Rehabilitation Sector/Group operations).

E. It should be large enough to accommodate multiple crews, based on the size of the incident.

F. It should be easily accessible by EMS units.

G. It should allow prompt reentry back into the emergency operation upon complete recuperation.

04. Site Designations

A. A nearby building or other structure.

B. Fire apparatus, ambulance, or other emergency vehicles at the scene or called to the scene.

C. An open area in which a Rehab Area can be created using tarps, fans, etc.

05. Resources

The Rehab Officer shall secure all necessary resources required to adequately staff and supply the Rehabilitation Area. The supplies may include these:

A. Fluids – water, activity beverage, oral electrolyte solutions and ice.

B. Food - soups, broth, or stew in hot/cold cups.

C. Medical - blood pressure cuffs, stethoscopes, oxygen administration devices, cardiac monitors, intravenous solutions, and thermometers (can be provided by EMS personnel).

D. Other - awnings, fans, tarps, smoke ejectors, heaters, dry clothing, extra equipment, floodlights, blankets and towels, traffic cones and fireline tape (to identify the entrance and exit of the Rehabilitation Area).

1.4 Rehab Sector

01. Initial Planning

Staff officers during the initial planning stages of an emergency response should consider rehabilitation. However, the climatic or environmental conditions of the emergency scene should not be the sole justification for establishing a Rehabilitation Area. 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.

02. Hydration

A critical factor in the prevention of heat injury is the maintenance of water and electrolytes. Water must be replaced during training 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.

03. Nourishment

The department shall 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.

04. Rest

The "two air bottle rule," or 45 minutes of work time, is recommended as an acceptable level prior to mandatory rehabilitation. Members shall rehydrate, if possible (at least eight ounces) while SCBA cylinders are being changed. Firefighters having worked for two full 30 minute rated bottles, or 45 minutes, shall be sent to the Rehab Area for rest and evaluation. 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 ten minutes and may exceed an hour as determined by the Rehab Officer. Fresh crews, or crews released from the Rehab, 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.

05. Recovery

Members in the Rehab 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. 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.

06. Medical Evaluation

A. Emergency Medical Services (EMS)

EMS may be provided and staffed by trained and qualified EMS personnel on the scene (at a minimum of BLS level). They shall evaluate vital signs, examine members, and make proper disposition (return to duty, continued rehab, or medical treatment and transport to medical facility). Continued rehab 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. EMS personnel shall be assertive in an effort to find potential medical problems early.

B. Heart Rate and Temperature

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, internal body temperature should be taken. If 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.

C. Documentation

All medical evaluations shall be recorded on standard forms along with the member's name and complaints and must be signed, dated and time by the Rehab Officer or his/her designee.

1.5 Accountability

The names of members and times of entry to and exit from the Rehabilitation Area shall be documented by the Rehab Officer or his/her designee. Members shall not leave the Rehab Area until authorized to do so by the Rehab Officer.