

San Mateo County Fire Service POLICIES AND STANDARDS MANUAL

Title: Incident / Event Rehabilitation Policy

Policy No. 2007-02

Adopted 09/10/2007

Revised XX/XX/XXXX

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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 that jeopardizes the safety and integrity of the operation.

Policy: This procedure shall apply to all emergency operations and training exercises where strenuous physical activity or exposure to heat or cold exists.

Procedures:

1. 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; nutritional 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.

2. Supervisors

All supervisors 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 safety and health. The command structure shall be utilized to request relief and the reassignment of fatigued crews.

3. 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 supervisor 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.

4. Establishment of Rehabilitation Unit

a. Responsibility

The Incident Commander will establish a Rehabilitation Unit Leader 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 unit and shall be known as the Rehabilitation Unit Leader. The Rehabilitation Unit Leader will typically report to the Incident Commander or the Logistics Section Chief, if established.

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b. Location

The Incident Commander will normally designate the location for the Rehabilitation Unit. If a specific location has not been designated, the Rehabilitation Unit Leader shall select an appropriate location based on the site characteristics and designations below.

c. Site Characteristics

- (1) The Rehabilitation Unit should be in a location that will allow for easy SCBA bottle drop off and refill, close to nutritional food, re-hydration supplies, and room for medical monitoring.
- (2) Once released by the Rehabilitation Unit Leader, the Rehabilitation Unit placement will allow for prompt entry into the staging area where the crews will check in with the Staging Area Manager.
- (3) It should be easily accessible by EMS units.
- (4) 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.
- (5) 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.
- (6) 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.
- (7) It should enable members to be free of exhaust fumes from apparatus, vehicles, or equipment.
- (8) It should be large enough to accommodate multiple crews, based on the size of the incident.

d. Site Designation

- (1) A nearby garage, building lobby, or other structure.
- (2) Several floors below a fire in a high rise building.
- (3) A school bus, municipal bus, or bookmobile.
- (4) Fire apparatus, ambulance, or other emergency vehicles at the scene or called to the scene.
- (5) Retired fire apparatus or surplus government vehicle that has been renovated as a Rehabilitation Unit. (This unit could respond by request or be dispatched during certain weather conditions.)
- (6) An open area in which a Rehabilitation Unit can be created using tarps, fans, etc.

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e. Resources.

The Rehabilitation Unit Leader shall secure all necessary resources required to adequately staff and supply the Rehabilitation Unit. The supplies should include the items listed below:

- (1) Fluids - water, activity beverage, oral electrolyte solutions and ice.
- (2) Nutritional Foods – Nutritional bars, soup, broth, or stew.
- (3) Medical - blood pressure cuffs, stethoscopes, oxygen administration devices, cardiac monitors, intravenous solutions and thermometers."
- (4) Other - awnings, fans, tarps, smoke ejectors, heaters, dry clothing, extra equipment, floodlights, blankets and towels, traffic cones and fire-line tape (to identify the entrance and exit of the Rehabilitation Unit).

5. GUIDELINES

a. Rehabilitation Unit Establishment

Staff officers should consider rehabilitation 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 Unit. Any activity/ incident that are 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 Unit are a heat stress index above 90 F or wind chill index below 30F

b. 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 re-hydration solution should be a 50/50 mixture of water and a commercially prepared activity beverage and administered at about 40 F.⁶ Re-hydration 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.⁷ carbonated beverages should also be avoided.

c. Nourishment

The Incident Commander 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 nutritional bars, apples, oranges, and bananas provide supplemental forms of energy replacement. Fatty and/or salty foods should be avoided.

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d. Rest

The "two air bottle rule," or 45 minutes of work time, is recommended as an acceptable level prior to mandatory rehabilitation. Members shall re-hydrate (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 immediately placed in the Rehabilitation Unit 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 Rehabilitation Unit Leader.⁸ Fresh crews, or crews released from the Rehabilitation Unit, 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 Rehabilitation Unit Leader.

e. Recovery

Members in the Rehabilitation Unit 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 can 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.

f. Medical Evaluation

- (1) Emergency Medical Services (EMS) - EMS should be provided and staffed by a Fire paramedic on the scene. They shall evaluate vital signs, examine members, and make proper disposition; return to duty, continued rehabilitation, medical treatment and or transport to medical facility. Continued rehabilitation should consist of additional monitoring of vital signs, providing rest, and providing fluids for re-hydration. Medical treatment for fire fighter's, whose signs and/or symptoms indicate potential problems, should be provided treatment and documentation in accordance with local medical control procedures. The Rehabilitation Unit Leader or other Supervisor may suggest an individual(s) to go to the hospital for further evaluation. When an individual is transported or sent to a medical facility, they must receive a work release from a physician prior to returning to work.
- (2) Heart Rate and Temperature- 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 100.6F, 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.⁹
- (3) Documentation – If there is a patient all medical evaluations shall be recorded on standard forms along with the member's name, complaints and must be signed, dated and timed by the Rehabilitation Unit Leader or his/ her designee.

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- (4) Firefighters that become a patient will follow appropriate County Medical Protocol including a Patient Care Report (PCR).
- (5) Health Information Privacy Portability Act (HIPPA) shall be followed if the firefighter (s) requires transport or is symptomatic (complaints).
- (6) Firefighters may not refuse to go to the rehabilitation area where, Medical evaluation/surveillance is recommended, but not mandatory..

g. Accountability

Members assigned to the Rehabilitation Unit shall enter and exit the Rehabilitation Unit as a crew. The crew designation, number of crew members, and the times of entry to and exit from the Rehabilitation Unit shall be documented by the Rehabilitation Unit Leader or his/ her designee on the Company Check-In/Out Sheet. Crews shall not leave the Rehabilitation Unit until authorized to do so by the Rehabilitation Unit Leader.

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6. Medical Rehabilitation Flow Chart

