

**JEFFERSON COUNTY FIRE DISTRICT #1  
STANDARD OPERATING GUIDELINES**

**SOG 604**

**INCIDENT REHAB**

**I. PURPOSE**

- A. 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.

**II. SCOPE**

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

**III. AUTHORITY AND RESPONSIBILITY**

- A. It will be the responsibility of the Chief and the officers to insure that these guidelines are followed.

**IV. STANDARDS**

A. Rehabilitation Sector Establishment

- 1. Rehabilitation should be considered by officers during the initial planning stages of an emergency response. Climatic or environmental conditions of the emergency scene should not be the sole justification. Any activity/incident that is large in size, long in duration and/or labor intensive will rapidly deplete the energy and strength of personnel. Climatic or environmental conditions that indicate the need to establish a Rehabilitation Area are a heat stress index (humiture) above 90 F or wind-chill index below 10 F.

B. Hydration

- 1. A critical factor in the prevention of heat injury is the maintenance of water and electrolytes. During heat stress firefighters should consume at least one quart of water per hour. 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.

C. Nourishment

- 1. The department shall provide food at the scene of an extended incident when units are engaged for three or more hours. Foods such as apples, oranges, and bananas provide supplemental forms of energy replacement. Fatty and/or salty

foods should be avoided.

#### D. Rest

1. The "two air bottle rule," or 45 minutes of work time, is recommended as an acceptable level prior to mandatory rehabilitation. Members should re-hydrate (at least eight ounces) while SCBA cylinders are being changed. Firefighters having worked for two full bottles, or 45 minutes, should be placed in the rehabilitation area for rest and evaluation. In all cases, the objective evaluation of a member's fatigue level should be the criteria for rehab time. Rest should not be less than ten minutes and may exceed an hour as determined by the Rehab Officer. Fresh crews, or crews released from the rehabilitation area, 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. In addition to the "two air bottle rule," non-SCBA wearing members should report to the Rehab Sector when fatigued or directed to do so by a supervising officer. Again, the objective evaluation of a member's fatigue level should be the criteria for rehab time.

#### E. Recovery

1. 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 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.

#### F. Medical Evaluation

1. Emergency Medical Services (EMS) should be provided and staffed by the most highly trained and qualified EMS personnel on the scene (at a minimum of BLS level). They should evaluate vital signs, examine members, and make proper disposition (return to duty, continued rehabilitation, or medical treatment and transport to medical facility). Continued rehabilitation should consist of additional monitoring of vital signs, providing rest, and providing fluids for re-hydration.
2. Vital signs including respiratory rate, heart rate, temperature and blood pressure shall be measured as early as possible in the rest period. If a member's heart rate exceeds 110 beats per minute, an oral temperature and blood pressure should be taken. If the member's temperature exceeds 101° F, and/or blood pressure is less than 100 or greater than 190 systolic, he/she should not be permitted to wear protective equipment. Treatment and/or transport should be considered based on current BLS/ALS protocol.

If temp is below 101° F and BP is above 100 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.

3. Documentation - All medical evaluations should be documented on an appropriate worksheet (*see appendix*). Documentation should include the name of the rehabbed firefighter, the date and time of rehab, vital signs, and the disposition of the rehabbed firefighter. Treatment and transport should be documented on a patient care report.
4. Accountability - Members assigned to the rehabilitation sector should enter and exit the rehabilitation area as a crew whenever possible. 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 their designee. Crews should not leave the rehabilitation area until authorized to do so by the Rehab Officer or their designee.

APPROVED:  
REVISED:

DATE 10-13-2004  
DATE 03-09-2006

---

Earl Cordes  
Fire Chief