

# *Augusta County Emergency Services Officers Association*

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## *Fire-EMS Standard Operating Guideline*

<b>Section:</b>	2 General
<b>Title:</b>	Emergency Incident Rehabilitation
<b>Date:</b>	August 2008

### **EMERGENCY INCIDENT REHABILITATION**

These suggested guidelines are a compilation of material and resources from FEMA, and the Emergency

#### **Incident Rehabilitation:**

Class that was developed and has been offered by the Augusta County Fire-Rescue Training Division.

The physical and mental demands associated with fire fighting,, extrication, emergency operations, hazardous material incidents and training for these situations, coupled with environmental factors (extreme heat or cold, humidity, wind) can have serious adverse effects on the safety and health of the individual provider. Individuals must be provided with adequate rest and rehydration in order to continue to function at a safe level. "REHAB" is designed to allow the body to rest, recover, and rehydrate so that the person can continue to function at the required levels, both physical and mental.

In the Incident Command structure, establishment of the Rehabilitation Sector comes under EMS Command. The need for Rehab should be realized early in the incident, so the necessary personnel, apparatus, equipment and supplies can be requested/provided.

#### **The REHAB site should provide/allow for:**

- physical rest
- far enough from "hot zone" for providers to remove all safety gear
- far enough from scene to allow for mental recuperation from stress/pressure
- protection from environmental concerns
- free from exhaust fumes from apparatus
- large enough to accommodate multiple crews at one time
- easily accessible to EMS apparatus
- easy re-entry to the emergency incident after recuperation

**Suggested REHAB areas are:**

- nearby garage, building lobby, or other structure
- school bus, municipal bus, bookmobile
- fire apparatus, EMS apparatus called to scene (dedicated to REHAB)
- REHAB unit  
open area (tarps, fans)

## **REHAB Sector Provisions and Resources**

### **REHAB Sector shall have the following provisions:**

- medical evaluation, treatment and monitoring
- food and fluid replacement
- mental rest
- relief from extreme climatic conditions
- EMS personnel and transport unit at the BLS level or higher (dedicated to REHAB)

### **REHAB shall have the following resources:**

- \*fluids/water/activity beverage; insulated containers/coolers
- \*ice
- \*food, soup, stew and hot/cold cups (must be low sodium soups/foods)
- \*medical equipment: BP cuffs, Stethoscopes, O2 & delivery devices, AED  
ALS equipment (IV fluids, monitors)
- \*awnings, fans, tarps, heaters, dry clothing, smoke ejectors
- \*floodlights, blankets, towels, traffic cones, fireline tape

### **Environmental Conditions which warrant REHAB:**

- MCI
- incident/training of long duration
- incident/training which is labor intensive
- Heat Index of >90 F (see appendix)
- Windchill Index of <10 F (see appendix)

### **Hydration:**

Prevention of heat injury is directly related to proper maintenance of water and electrolytes. During heat stress, fluid should be replaced at a rate of one (1) quart per hour. Heat stress can occur when the ambient temperature is low (cold), and proper hydration is still an issue. The fluid of choice is activity beverage, at 3/4-full strength (over ice). Alcohol and caffeine beverages should be avoided, as they actually promote further dehydration. Carbonated beverages should also be avoided.

### **Nourishment:**

If personnel will be at scene for three (3) hours or more, provisions should be made for feeding the teams. Fresh or canned fruits, low-sodium soups, stews, or broth are highly recommended.

### **Rest:**

The "two bottle rule" or 45 minute rule applies as an acceptable time frame before mandatory REHAB. Rehydration (at least 8 oz) should occur as the Self Contained Breathing Apparatus (SCBA) air bottle is changed.

### **Recovery:**

All members in REHAB should maintain high levels of hydration. Members should not be moved from "hot" zones, directly to air-conditioned areas, there should be a cool down area/period first.

Some medications inhibit the body's ability to cool itself and extreme caution should be used. People on antihistamines, diuretics or stimulants need to be carefully monitored.

**Medical Evaluation:**

Emergency Medical Services care should be provided, on scene, by the highest trained personnel available (minimum of BLS crew). One crew should be dedicated to REHAB (not be the only available transport unit and try to do REHAB). The EMS personnel will evaluate vital signs, examine the members, and make proper disposition (return to field, stay in REHAB for recovery; medical treatment and transport).

## **Vital Signs**

### **LOC:**

All members must remain awake, alert and oriented; anyone who has altered LOC or altered mental status SHALL NOT RE-ENTER the operational sector.

### **Blood Pressure:**

Systolic should remain between 100-150 mmHg. Diastolic should remain below 90 mmHg. If BP does not stay within these parameters, the person should be held for additional evaluation.

### **Pulse and Temperature:**

Pulse rate should be taken as early in rest period as possible. If pulse exceeds 110 beats per minute, take an oral temperature. If the temperature is not within the parameters of 97-99.5 °F, the person needs to remove protective clothing/equipment.

### **Respiratory Rate and Lung Sounds:**

Respiratory rate should remain between 12-24 breaths per minute, with regular rhythm and effort. Anyone who has a persistent cough, rales, wheezing, or diminished lung sounds in any lobe should be held for additional observation.

### **EKG Monitoring:**

If ALS available, EKG monitoring should be provided. As long as member shows NSR, he/she can be allowed to return to the operations sector. Any arrhythmia's or abnormalities should be documented, and transport considered.

### **Miscellaneous Conditions:**

Pregnant women should never be allowed into the operational sector

Any member who has consumed alcohol within the last six (6) hours should not be allowed into the operational sector.

Any member who experiences nausea, vomiting, diarrhea, fever, or weight loss of more than 3% of total body weight, should not re-enter operational sector.

Any member with positive orthostatic vitals should be held for additional observation. (BP drops 20mmHg or pulse increases 20 beats per minute)

### **Documentation:**

All medical evaluations shall be recorded on standard Pre-hospital Patient Care Report (PPCR) forms, along with the member's name and the medical complaint. The form(s) must be signed by the REHAB officer or his/her designee.

**Treatment:**

Continue to monitor vitals of members in REHAB. Follow CSEMS Protocols when treating patients at the scene. Consider need for ALS, O2 therapy, IV's, EKG monitoring. Contact Medical Control with specific questions.

**Accountability:**

Members shall not leave REHAB until authorized to do so by the REHAB Officer. If the REHAB Officer feels that a member should not return to the operational sector, he/she will contact EMS Command, and EMS Command will contact the Accountability Officer.