Guideline 208.0
Rehab

Purpose:

The purpose of this Standard Operating 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. This guideline shall apply to all emergency operations and training exercises where strenuous physical activity or exposure to heat or cold exists.

Guideline:

I. ESTABLISHING THE REHAB DIVISION:

A designated Rehab Area remote from the fire or emergency incident, will be established at the discretion of the Incident Commander in consultation with the EMS Supervisor. If the Incident Commander determines that Rehab is necessary, the on-scene EMS Unit will be assigned to manage the Rehab Division under the Incident Commander. Rehab Officer shall report directly to the Incident Commander unless otherwise directed.

EMS shall be responsible for staffing the Rehab Division until released by Incident Command.

II. LOCATING THE REHAB AREA:

It is crucial for Incident Command to establish the Rehab Division away from any environmental hazards, or by-products of the fire, such as smoke, gases or fumes. During hot months, the ideal location might include a shady, cool area distant from the incident. In winter, a warm, dry area is preferred. Regardless of the season, the area should be readily accessible to EMS personnel and their equipment, so they may restock the Division with supplies, or egress in the event that emergency transport is required.

Rehab sites can also be established in garages or other structures near by. Keep in mind that the firefighters will be dirty so we must not ruin someone's building if rehab is to be indoors. During large-scale incidents, like multi-alarms fires, Incident Command should consider establishing multiple Rehab areas as the situation warrants.

III. COORDINATION AND MANNING:

The EMS Supervisor on-scene will be designated as the Rehab Officer. The incident itself will determine the number of personnel needed to staff the Rehab Division; however, a minimum of two trained EMS personnel should be assigned initially to monitor and assist firefighters in the Rehab Division. EMS personnel should try to make

"working" members as comfortable as possible. The Incident Commander should be advised on what radio frequency the Rehab Division can be contacted.

IV. EVALUATION OF PERSONNEL:

It is important for Incident Command and all Officers to monitor fireground personnel for telltale signs of exhaustion, stress, and or physical injury. All personnel are encouraged to report to their Officers that they feel the need to go to the Rehab Division at any time the firefighter feels the need to do so. Symptoms may include weakness, dizziness, chest pain, muscle cramps, nausea, altered mental status, difficulty breathing, and others.

Firefighters who have inhaled the products of combustion or had direct skin contact with a hazardous material should report to Rehab as soon as possible for baseline evaluation.

The "two air bottle rule" or 45 minutes of work-time, is the recommended practice as an acceptable level for mandatory rehabilitation. Firefighters shall re-hydrate (at least eight-ounces of fluid) while SCBA cylinders are being changed. When firefighters have used two full 30-minute rated bottles or worked for a total of 45 minutes shall report to the Rehab Area for rest and evaluation. 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 Rehab, shall report to the Staging Area to ensure that the fatigued firefighters are not required to return to duty until they have rested, evaluated and released by the Rehab Officer.

V. PHYSICAL EXAMINATION OF FIREFIGHTING PERSONNEL:

EMS personnel shall examine all Firefighters when they report to the Rehab Area. Paramedics/EMTs should check and evaluate vital signs, and make proper disposition; i.e. return to duty, continued rehabilitation, or transport to medical facility for treatment. The physical examination should include, at a minimum the following:

1. Glasgow Coma Scale.
2. Vital signs (blood pressure, pulse, breathing rate, etc).
3. Assessment of lung sounds.
4. Oxygen Saturation (pulse Oximetry).
5. An EKG shall be administered, when chest pain or irregular heartbeat is present.
6. Skin Condition and Color.
7. Body Temperature.

If EMS personnel note abnormalities in the physical examination, as outlined below, the firefighter should not be permitted to wear protective equipment and/or re-enter the active

work environment, until all parameters are within normal ranges. EMS personnel will report any abnormal findings to the EMS Supervisor.

Re-examination should occur at ten-minute intervals. EMS personnel should record examination results on the fire ground medical evaluation form. Treatment shall be in accordance with established protocols.

VI. PHYSICAL EXAMINATION ABNORMAL PARAMETERS:

A. Glasgow Coma Scale — Less than **15**
B. Vital Signs:
  1. Blood Pressure
    a. Systolic Greater than **150**
    b. Systolic Less than **110**
    c. Diastolic Greater than **98**
  2. Pulse
    a. Greater than **110**
    b. Less than **60**
  3. Respiratory
    a. Greater than **24**
    b. Less than **12**
  4. Lung Sounds
    a. Presence of:
      i. Rales
      ii. Rhonchi
      iii. Wheezing
C. Oxygen Saturation
  1. less than **95%**
D. EKG (Chest Pain or Irregular Heartbeat)
  1. Presence of:
    a. PVC's
    b. Tachycardia
    c. Bradycardia
E. Skin Condition and Color
  1. Flushed
  2. Pale
  3. Cyanosis
  4. Cold Diaphoresis
F. Body Temperature
  1. Greater than **100.6 F**
  2. Less than **97.6 F**

In the event that abnormal presentations are present, the firefighter should immediately receive additional treatment, especially if abnormalities persist following fifteen to twenty minutes of rest. Firefighters complaining of chest pain, difficulty breathing or altered mental status must receive immediate ALS treatment and be transported to definitive health care. EMS will follow established protocols for ALS intervention. The Incident Commander must be notified and given the name, condition, and destination of any firefighter transported from the emergency scene. This communication must be given via face-to-face or other secure communication.

VII. TREATMENT DURING REHAB:

Upon completing the physical examination, the following steps should be taken to minimize further risk to firefighting personnel:

Before ingesting anything orally, fluid or solid, it is recommended that the firefighter clean his/her hands and face with water and a cleaning agent, as provided by Rehab personnel.

A. The firefighter should re-hydrate:
    1. Oral re-hydration and nutrition is recommended in the form of 1-quart of fluids over a span of 1hour.
B. Body temperature should be reduced by:
    1. Remove helmets/hoods/mask.
    2. Remove Turn-out gear (to include pants and boots).
    3. Cool body temperatures gradually using fans, tap water, etc.
    4. Firefighters should be offered oxygen therapy via 02 mask.
    5. Standing rest before reporting for further assignments.
    6. Fire personnel should report to Staging when presentation is deemed normal by the attending EMS personnel.

Note: EMS personnel shall avoid cooling the body using ice packs, ice water or hose streams. Cooling should be gradual, limiting further shock to the body.

IX. RETURNING TO DUTY:

Firefighting personnel may report their availability to staging when:

A. Vital signs are within normal limits.
B. There is an absence of any abnormal signs and symptoms.
C. A minimum period of 10 minutes for rest and re-hydration has been completed.
D. When released by Rehab Officer.