It is the policy of the Phoenix Fire Department that no member will be permitted to continue emergency operations beyond safe levels of physical or mental exertion. The intent of the Rehabilitation Sector is to prevent the risk of injury that may result from extended field operations under adverse conditions.

PROCEDURE
The Rehabilitation Sector, radio designation REHAB, will be used to evaluate and assist personnel who could be suffering from the effects of sustained physical or mental exertion during emergency operations. Rehab Sector will provide a specific area where personnel will assemble to have:

1. Assessment of vital signs
2. Revitalization - rest, hydration, refreshments, and temperature regulation
3. Medical evaluation and treatment of injuries, if needed
4. Transportation for those requiring treatment at medical facilities
5. Reassignment as needed

NOTE:
The Rehab Sector Officer is responsible for the accountability of crews assigned to Rehab Sector. Members assigned to Rehab do not report back to their previously assigned sector. To be reassigned to another sector, they must be assigned by Command after being cleared by Rehab.

A Rehab Team concept will be used wherever possible to establish and manage the Rehab Sector. This team shall consist of:

1. Rehab Truck
2. Utility Truck
3. Rescue
4. ALS Company
5. Designated Sector Officer
6. C959, as needed
7. Health Center officer, as needed

A Rehab truck will be dispatched on all First Alarm and greater incidents when heat stress advisory is in effect. It will be the responsibility of the Incident Commander to make an early determination of incidents requiring Rehab Sector.

It may be necessary to establish more than one Rehab Sector. When this is done, each sector will assume a geographic designation consistent with the location at the incident site, i.e. Rehab South, Rehab North.
City buses may also be called to the incident scene to provide cooling or shelter.

Rehab sector should be located in functional location for crew access. In smaller incidents, a utility truck may be all that is required. It is the responsibility of the Rehab Sector Officer and/or Command to determine resources for the sector.

The Rehab Sector area boundaries will be defined and will have only one entry point. It will be divided into the following four Functions:

**Function A: Assessment**
This is the initial entry point and assessment area. Members arriving at the entry point will remove their Personal Protective Equipment prior to entry. Rehab Sector is responsible for the continuation of Accountability and will assign a member to collect passports from crews and take a pulse rate on all crew members. The purpose of this area is to identify any member who may be in need of more attention than just a recovery period. If a member enters with no symptoms of overexertion and vitals in normal range, may return to duty without further evaluation after REHAB. Any member who has a pulse rate greater than 120 will be recorded and tracked thru the rehab sector. The member will proceed to rehydrate and rest with their crew members and be re-evaluated for pulse rate after 20 minutes. If a member enters Rehab with ALOC or irregular heartbeat they will immediately receive ALS treatment. If after 20 minutes of rest and hydration the members pulse is still above 120bpm or signs and symptoms of dehydration then they will receive ALS interventions based on guidelines of Section C.

**Function B: Hydration and Replenishment**
Rehab personnel will provide supplemental cooling devices (active and/or passive cooling or warming as needed for incident type and climate conditions, fluid and electrolyte replacement, and the proper amount of nourishment.

**Function C: Medical Treatment and Transport**
ALS crews and a Rescue will manage this function. Here members will receive evaluation and treatment for over exertion and injuries. The crews assigned will follow standard ALS Protocol and advise the Rehab Sector Officer of the need for medical treatment and / or transportation requirements of personnel due to physical condition.

1. **Vital Signs & Assessment Standards for REHAB:** The ALS crew in this section will pay close attention to the members:
   Physical Observations:
   1. Personnel complaining of chest pain, dizziness, shortness of breath, weakness,
nausea, or headache.
2. General complaints such as cramps, aches and pains, rate of perceived exertion
3. Symptoms of heat or cold related stress
4. Changes in gait, speech, or behavior
5. Alertness and orientation to person, place and time
6. Skin Color
7. Obvious Injuries

To be reassigned – Members must have:

A heart rate below 100 bpm with no irregular beats
Systolic BP below 160
Diastolic BP below 100
Respiratory rate between 12-20 per minute
No abnormal neurological findings. (see below)
No complaints

a. Heart Rate Values (HRV) - normal resting pulse rate is between 60 and 100 bpm. At no time will an emergency responder be allowed to return to duty until the pulse rate is below 100 beats per minute after 20 minutes of rest. Members with a HRV over 100BPM after 20 minutes will receive ALS evaluation and treatment per standard medical protocol.

b. Respiratory Rate (RR) - normal value is a rate between 12-20 breaths per minute. Before personnel are returned to duty they should have a respiratory rate that falls within normal values. Persons with a persistent respiratory rate greater than 20 breaths per minute after 20 minutes of rest shall receive ALS evaluation and treatment per standard medical protocol.

c. Blood Pressure (BP) - Upon recovery in rehabilitation a blood pressure should return to, or even be slightly lower than their baseline. Personnel with a systolic pressure greater than 160 and / or a diastolic greater than 100 after 20 minutes in Rehab must go thru an ALS evaluation. Rehab sector will follow appropriate treatment protocols based on the findings of the ALS evaluation.

d. Neurological Assessments- personnel not alert and oriented to person, place or time, and/ or who exhibit changes in gait, speech or behavior, and/ or other persistent abnormal neurological findings shall receive ALS evaluation and treatment per ALS protocols without waiting for the above mentioned 20-minute rest.

e. Skin and Body Temperature- The following skin symptoms require additional evaluation.
I. Heat Stress - Personnel with skin that feels hot to the touch, dry, red, bumpy rash or is blistering.

II. Cold Stress - When skin is pressed turns red then purple, then white and is cold, looks waxy, feels numb or has a prickly sensation are experiencing signs of frostbite.

III. Body Temperature - For personnel with body temperatures greater than 99.5°F after 20 minutes may be not returned to duty and will be transported to a hospital for further evaluation. (Note: Oral measurements are approximately 1.0 degree F or 0.55 degree C lower than the normal Core Body Temperature. Oral Temperatures are subject to error with tachypnea / hyperventilation. Tympanic Measurements may be up to 2.0 degrees F or 1.1 degree C lower than core body temperature.) Cooling measures as appropriate should be implemented.

f. Pulse Oximetry - Values must be above 92% or personnel will not be allowed to return to operations. Persons with a persistent pulse oximeter value below 92% after 20 minutes of oxygen therapy and rest will receive ALS evaluation and treatment per standard medical protocol. (Note: High readings may also be indicative of Carbon Monoxide saturation.)

g. Blood Glucose/Sugar (BGS) - will be assessed whenever abnormal neurological findings are observed. If abnormal, treat as per PFD protocol.

h. Electrocardiogram (EKG) Monitoring and 12 Lead EKGs - Responders with a persistent heart rate over 100 BPM after 20 minutes of rest shall receive a 12 lead EKG, ALS evaluation and treatment as needed. Members with an irregular pulse will require ALS Treatment irregardless of time in Rehab sector.

**FUNCTION D: Documentation**

Time-in and time-out for members/crews entering or leaving the rehabilitation area shall be tracked with vitals. Any member requiring further evaluation beyond 20 min will be documented on an EMS patient care report. Where emergency medical care is provided, an EMS Patient Care Report shall be generated and a copy placed in the member’s employee health record.

**FUNCTION E: Reassignment**

On greater alarms, Health Center staff officer may be available in this section. This critical section determines a crews’ readiness for reassignment. Diligent efforts and face-to-face communication with the Rehab Sector Officer are required. Rehab crews will advise the Rehab Sector Officer of all companies’ status for reassignment and crews that are running
short or without a company officer. This information is relayed to Command by the Rehab Sector Officer.

The Rehab Sector Officer will update Command throughout the operation with pertinent information including the identities of companies in Rehab, the companies available for reassignment, and the status of injured personnel off the tactical channel. All personnel leaving Rehab will retrieve passports from the Rehab Sector Officer.

Company Officers **must** keep crews intact and report to Rehab. The Rehab Sector Officer will direct the crew on arrival; however, it is the Company Officer’s responsibility to make sure crew members receive refreshments, treatment if required, and rest and a medical clearance prior to re-assignment or return to duty.