Issued: DRAFT

SECTION 104 Rehab Page |1

#### 1.0 PURPOSE

The Riverside County Fire Department will ensure the health, safety, and well-being of our employees during incident and/or training assignments. No member of Riverside County Fire Department shall be permitted to continue emergency operations or training exercises beyond safe levels of physical or mental endurance.

The Incident Commander/Supervisor shall consider the use of REHAB on any incident or training exercise where personnel are performing arduous or extensive work or exposed to high or low ambient temperatures.

### 2.0 PROCEDURE

- A. It shall be the responsibility of the Incident Commander / Supervisor to implement the REHAB SOG.
- B. It is the responsibility of every member of the Riverside County Fire Department to monitor his or her own exertion levels and capabilities.
- C. Rehabilitation Group Supervisor (Radio designation REHAB) will be implemented to evaluate personnel for the effects of physical and mental exertion during any incident or training exercise where this Policy is implemented.
- D. Incident Commanders shall order enough resources to effectively REHAB crews assigned to incidents and training.
- E. The REHAB Group will provide a designated area(s) where personnel will assemble for:
  - 1. A physical assessment
  - 2. Rest, Hydration, Nutrition
  - 3. Medical evaluation & continuous monitoring
  - 4. Reassignment

## 3.0 COMMAND STRUCTURE

- A. REHAB is in the Service Branch of the Logistics Section alongside the Medical Unit. On smaller incidents REHAB may work under the Operations Section or reporting directly to the IC. The extent of the incident dictates the location for REHAB within the command structure.
- B. There may be the need for multiple REHAB Units or Areas on an incident. The Rehab area shall be named after its geographical location.
- C. A Work/Rest crew rotation cycle will be implemented by the IC or designee based on the incident or training exercise needs.

























Issued: DRAFT

SECTION 104 Rehab Page |2

#### 4.0 <u>COMMUNICATION</u>

- A. The Rehab Group Supervisor will utilize the designated tactical frequency.
  - 1. A separate frequency may be requested when necessary.
- B. Whenever a firefighter requires transport for injury or illness from the REHAB Group to a hospital for further evaluation and treatment, it is the responsibility of the REHAB Group Supervisor to notify the IC (or designee).
- C. REHAB may be established at any type of incident. If a firefighter requires transport for injury or illness from the REHAB Group during a Mass Casualty Incident (MCI) it shall be the responsibility of the REHAB Group Supervisor to ensure that MEDCOMM is notified to provide the appropriate destination and transport priority.

#### 5.0 CONSIDERATIONS

- A. After a period of intense work, with or without wearing an SCBA, personnel will consider Informal and/or Formal-REHAB. With consideration to the following;
  - 1. OSHA Heat Index guidelines. (Appendix A- 31740.901)
  - 2. IC or their designee should be aware of the cumulative effects of previous incidents and potential of future incidents on the firefighters assigned.

#### 6.0 FORMS OF REHAB

#### A. Informal-REHAB

- Informal-REHAB is the process of firefighters cooling, resting, and hydrating outside
  the constraints of a Formal-REHAB area. In many cases Informal-REHAB will be the
  only REHAB activities performed at incidents.
- 2. Informal-REHAB can have a designated location or occur at the most advantageous location to accomplish incident objectives.
- 3. Informal-REHAB can include, but not limited to, on-scene shade, in-cab AC, apparatus ice chests, and cool towels.
- 4. Following Informal-REHAB, Company Officers will evaluate their crew for their ability to return to work, or the need for further REHAB.
- 5. Crews and Supervisors shall adhere to the CAL FIRE Heat Illness Prevention Plan.

#### B. Formal-REHAB

- 1. A designated REHAB Area(s), that has been established with an entry/exit point, Resource Tracking, Medical Monitoring, Recovery area, and Documentation.
- 2. REHAB Group Location

























**FCA** Revised:

Issued:

**DRAFT** 

SECTION 104 Rehab Page | 3

- a. Often co-located with Breathing Support / Medical Unit.
- b. Smoke & exhaust free environment.
- c. Sheltered from environment (shaded or enclosed) for the ability to cool down or warm-up.
- d. Large enough to accompany crews and Rehab personnel.
- e. Away from intrusive press and scene operations, close enough to avoid additional fatigue.
- 3. It shall be the responsibility of the REHAB Group Supervisor to notify the IC when Formal-REHAB Areas have been established.
- 4. It shall be the responsibility of the IC to notify the ECC and all units on-scene that Formal-REHAB has been established.
- 5. Personnel must go through Formal-REHAB if it has been established
  - a. Utilize work / rest crew rotation designated by IC / Supervisor.
- 6. Where Formal-REHAB areas have been established, but geography limits their use, consider the following
  - a. Adjust work intensity, take frequent recovery breaks.
  - b. Rotate crews into Formal-REHAB when possible.

### 7.0 REHAB PROCESS

- A. When Formal-REHAB is used the REHAB area will be staffed with sufficient personnel as dictated by the Incident Commander and must include sufficient ALS personnel.
- B. A REHAB Group Supervisor will be established to oversee the REHAB area. If incident scale dictates more than one REHAB area, then the REHAB Group Supervisor will oversee the separate REHAB Groups. The REHAB Group Supervisor will report to the Medical Unit Leader or Logistics/ Incident Commander.
  - 1. Responsible for maintaining the Resource Tracking Worksheet (37021.904104.02).
  - 2. Responsible to ensure that Medical Monitoring is completed.
  - 3. Responsible for updating Operations/ Incident Commander that units have exited REHAB and are ready for re-assignment.
- C. Standby Ambulance Crews should be avoided when staffing the REHAB group and left available to transport patients.

D.C. Medical Monitoring & Recovery

1. All personnel entering REHAB will be assisted in removal of gear and given gross decontamination.

























Issued: DRAFT

SECTION 104 Rehab Page |4

- 2. Personnel in REHAB will receive an initial physical assessment for;
  - a. Alertness and orientation.
  - b. Changes in gait, speech or behavior.
  - c. Symptoms of heat or cold-related stress.
  - d. Any additional complaints.
- 3. Personnel in REHAB will have an initial set of vital signs recorded on the Medical Monitoring Worksheet (31740.902).
  - a. Heart Rate
  - b. Blood Pressure
  - c. Tympanic temperature
  - d. Pulse Oximetry
  - e. Carboxyhemoglobin (when available)
  - f. Glasgow Coma Scale
- 4. Personnel will remain in the designated REHAB area until released by the REHAB personnel.
- 5. Hydration and passive, active, or emergency cooling or warming will be provided.
  - a. Passive Cooling- Occurs when natural evaporative cooling can take place. (i.e. shade, fans, removal of safety gear, in cab air conditioning).
  - b. Active Cooling- Takes place when external cooling measures are used to aid passive cooling. (i.e. cold-water towels and/ or submersion of forearms into ice water).
  - c. Emergency Cooling- Rapid and aggressive cooling interventions to decrease the risk of serious complications (such as rhabdomyolysis) or death. (i.e. full body cold water immersion intervention to patients identified as having a heat stroke).
    - Inclusion Criteria- Exertional activity of any kind with CNS compromise (A.L.O.C., unsteady gait, collapse, disoriented, headache, dizziness, etc.) and any elevated body temperature.
    - ii. Procedure (if possible)- Remove all protective equipment and clothing from patient (underwear ok to remain in place). Place patient in ice bath while ensuring the neck and head remain above water. Continuously stir/agitate water for maximum effect. Patient should remain immersed in water for a maximum of 15 minutes and then transported. Cold water immersion interventions may be terminated early if all CNS symptoms resolve, patient begins to shiver, or if ABC's are otherwise unable to be managed.

























Issued: DRAFT

SECTION 104 Rehab Page |5

6. Rehab personnel will monitor for signs & symptoms indicating the need for further REHAB or hospital transport.

- 7. Prior to release from REHAB, a second set of vital signs will be taken.
  - a. No personnel will be allowed to resume working if while seated their:
    - i. Heart Rate is greater than 110 BPM
    - ii. Systolic Blood Pressure is lower than 90 mmHg
    - iii. Tympanic temperature is greater than 100.4°F with associated CNS compromise
    - iv. Pulse Oximetry reading is less than 94%
    - v. Carboxyhemoglobin reading is above 15ppm
    - vi. Glasgow Coma Scale of less than 15
- If ANY vital signs are higher than the stated thresholds after rest and hydration, it will be the discretion of REHAB personnel to offer further REHAB or hospital transport. In any case, vital signs will be taken immediately prior to releasing personnel from REHAB.
- 9. Medical Monitoring will include all ALS components when indicated.
- 10. Personnel who have a chief complaint onset during REHAB will be transported to the closest most appropriate hospital for evaluation.
- 11.ANY injuries or illnesses found during REHAB will be communicated through the Chain of Command.

#### 8.0 REASSIGNMENT

A. It is the responsibility of the REHAB Group Supervisor to track resources and make notification to the IC or designee when resources are available for reassignment.

#### 9.0 REHAB EQUIPMENT

- A. A REHAB kit shall be carried on each response vehicle and will consist of the following items packaged in a tool bag: <a href="education-department-specific">-department-specific</a>
  - 1. 1 Emergency cooling bag
  - 2. 4 Towels
  - 3. 1 roll of 33-gallon trash bags

#### 10.0 TRAINING EXERCISES

























Issued: DRAFT

SECTION 104 Rehab Page |6

A. Certain leniencies are allowed by Cal OSHA when operating during emergency incidents. Any form of training exercise is not included in these leniencies. All formal and informal training settings will include Informal or Formal Rehab as determined by the Instructor/Supervisor.

1. Training exercises that meet the REHAB criteria will utilize POLICY 31740.

### 11.0 DOCUMENTATION

- A. It shall be the responsibility of the Incident Commander to ensure documentation is maintained through the Rehab Group Supervisor using:
- B. 37021.904104.02 Resource Tracking Worksheet
- C. 31740.902 Rehab Group Medical Monitoring Worksheet
- D. 37021.927 "REHAB AREA" sign when needed.
- Any firefighter that is transported to a hospital will receive a Patient Care Report to be included in the incident documentation.
- F. On complex incidents, documentation will be reviewed following incidents by the Incident Commander, Training, EMS, and Health & Safety.

























**SECTION 104** 

Revised:

Rehab

Issued:

**DRAFT** 

Page |7

## 12.0 OSHA HEAT INDEX GUIDELINES

# **OSHA Heat Index Guidelines**

Heat Category	Heat Index (F°)	Easy Work		Moderate Work		Hard Work	
		Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)
<b>Low</b> (Green)	<91°F	No Limitations	1/2	50/10	3/4	40/20	1
Moderate (Yellow)	91-103°F	No Limitations	3/4	40/20	3/4	30/30	1
<b>High</b> (Red)	103-115°F	No Limitations	3/4	30/30	3/4	20/40	1
Extreme (Black)	>115°F	50/10	1	20/40	1	10/50	1

# **CAUTION**

Hourly fluid intake should exceed 1.5 qts. Daily fluid intake should not exceed 12 qts.

Determining the heat index for a location can be found by downloading the OSHA -NIOSH Heat Safety Tool app on IOS or Android

IOS – App Store



**Android – Google Play** 

























