LOVELAND	PERSONNEL INCIDENT RE	2015revA		
	AUTHORED BY:	FESSAM #	EFFECTIVE DATE:	
<b>†</b>	Bobby Bartlett	7F.3	3/16/15	
Breath	APPROVED BY:		REVISION DATE:	
Allescon	Fire Chief Mark Miller		3/16/15	
VIHOR!	Mark Miller			

## **Procedure:**

#### ESTABLISHING REHABILITATION

- 1. The incident commander (IC) should establish Rehabilitation (Rehab) when personnel need rest and rehabilitation at an incident. Rehab generally functions as an area to rest and rehydrate, as well as have vital signs monitored by EMS personnel. Considerations should include:
  - Scenes > 1 hour
  - Any personnel that goes through 2 cylinders
  - Any personnel with a Glasgow Coma Scale < 15
  - Climatic conditions
    - o Heat index above 90°F
    - o Wind chill index below 10°F
- 2. The Logistics Section of the Incident Command System (ICS) oversees rehab. If Logistics is not established at the incident, the staging area manager directs the Rehab Area. A member of TVEMS should be designated as the rehabilitation leader.
- 3. A nearby building or location may be designated as the Rehab Area. Special facilities or equipment, such as an ambulance or LFRA/LPD apparatus, may also function as the Rehab Area. The location chosen for the Rehab Area should provide:
  - Physical rest
  - An area where personal protective equipment (PPE) may be removed
  - Protection from the elements and vehicle exhaust
  - Water and other fluids to rehydrate personnel
  - EMS personnel and equipment to monitor all personnel on scene
  - Provide access to patients by transport ambulances
  - Large enough to accommodate multiple crews
- 4. The Rehab Area should be established away from the Staging Area; this keeps personnel separate from the emergency scene and does not interfere with response to the incident.

5. To maintain accountability, personnel sent to the Rehab Area enter and exit as a crew. Exceptions can be made only if other staged personnel are available to maintain standard crew sizes and are needed for tactical operations. Personnel are not to leave the Rehab Area until authorized by the rehab leader or staging area manager. Once released from the Rehab Area, crews report for assignment or demobilization. Crew leaders will monitor the condition of their personnel throughout an incident and be responsible to get them to the Rehab Area when needed.

#### 6. Recycle vs. Rehab

The term "recycle" is defined as a timely and efficient means of air replacement and rehydration of companies while maintaining their original assignment. This simply means that when a crew is exiting the hazard zone, either electively or by orders, in order to change SCBA cylinder's, get a drink of water and gather different or more tools, they will then report back "on-deck".

Recycling is different than rehab. "Rehab" designates that the company will be removed from the hazard zone and will be unavailable for assignment until an appropriated rest period is given and members are rested, re-hydrated and medical examination checks have been completed. The company will then notify IC they have completed rehab and are ready for reassignment.

#### **GENERAL REHABILITATION HEALTH GUIDELINES**

- 7. Hydration: To prevent heat-related health complications, personnel should consume at least one quart of water an hour, even in cold-weather operations. A 50/50 mix of water and an electrolyte replacement is optimal to rehydrate firefighters. Caffeine and carbonated beverages should be avoided.
- 8. Nourishment: The IC should consider food at incidents where units work 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. Personnel shall also ensure that they have a minimum of one (1) MRE and some snacks in their personal gear.
- 9. Rest: Firefighters should rest and be evaluated after every 45 minutes of intense work without an SCBA or whenever firefighters deplete two 30 minute air cylinders/one 45–60 minute cylinder. Medical evaluation determines the amount of rehabilitation time needed. This time is based on heart rate, body temperature, respiratory and blood pressure factors specified in this policy.
- 10. Medical examination: TVEMS personnel should evaluate the firefighters in the Rehab Area. Vital signs (heart rate, temperature, respirations and blood pressure) will be taken to provide the guidelines to determine whether firefighting personnel will return to tactical operations, remain in rehab or receive medical treatment and/or transport. TVEMS will complete an Emergency Incident Rehab report for all personnel that enter the Rehab Area.

Vital signs: There are no established standards for the monitoring of vital signs. LFR will

use the guidelines established by the Pre- and Post-Entry Medical Evaluation Form and accepted fire service practices for medical monitoring. EMS personnel should evaluate the vital signs, examine the firefighters and determine the proper disposition (return to tactical operations, continue rehab or receive medical treatment and/or transport of the patient). Heart rate and temperature will be measured upon entry into the Rehab Area.

LFR should adhere to the following exam results and actions during incidents:

Category I	Categ	Category III			
Pulse <110 without other	Pulse >110 or other signs and	Temp >103.9°F			
signs or symptoms					
Minimum of 10 minutes of	Take an oral temperature	Treat and transport per			
rest and 1 qt. of rehydration		•			
Release to staging	<100.6°F	>100.7°F but <103.9°F			
	Remove protective	Remove protective			
	clothing. Rest and	clothing. Rest and			
	rehydrate for 10 minutes.	rehydrate for 10 minutes.			
	Reassess pulse after 10	If the temp is still >101.6°F			
	minutes. If <100 then the then treat and transport				
	FF returns to staging.				
	Pulse still >100	Pulse still > 100			
	May repeat rest and	Treat and transport per			
	rehydration up to 5 times TVEMS protocol				

- Heart Rate The heart rate should be measured for 30 seconds as early as possible in the rest period. If a firefighter's heart rate exceeds 110 beats per minute, an oral temperature will be taken.
- Temperature If the firefighter's temperature exceeds 100.6 F they should not be permitted to wear protective equipment. If it is below 100.6 F and the heart rate remains above 110 beats per minute, rehabilitation time will be increased. If the heart rate is less than 110 beats per minute, the chance of heat stress is negligible.
- Blood Pressure The blood pressure should be measured as part of the overall medical assessment. If the Systolic is > 150 and/or Diastolic is > 90, then the firefighter should receive additional rehab.
- Respirations The respiratory rate should be measured as part of the overall medical assessment. If the respiratory rate is >25, then the firefighter should receive additional rehab.

## **Purpose:**

To ensure the physical and mental condition of personnel operating at an emergency or training does not deteriorate to a point that adversely affects individual or crew safety.

#### **Responsibility:**

**INCIDENT COMMANDER**: The IC shall consider the circumstances of each incident and provide for adequate provisions early in the incident for the rehabilitation of all personnel operating at the scene. When warranted, the IC shall designate a rehabilitation leader.

**REHABILITATION LEADER**: The rehabilitation leader shall be selected from qualified EMS personnel (typically TVEMS) or an LFRA officer (if EMS is not available). The minimum requirement for this position is an EMT-B. The rehabilitation leader's responsibilities shall include: designating the location of the Rehabilitation Area if the IC has not already done so, securing and providing the necessary resources for rehabilitation, maintaining accountability and remaining in the Rehabilitation Area at all times.

**OFFICERS**: All officers shall maintain an awareness of the condition of each crew member. The officer should ensure that adequate steps are taken to provide for each member's safety and health, including monitoring for signs of heat stress. The command structure shall be utilized to request relief and the reassignment of fatigued crews. Officers shall ensure that their company is properly checked into the Rehabilitation Area and receives medical monitoring as outlined by this policy.

**PERSONNEL OPERATING ON SCENE**: During an emergency incident or training evolution, all personnel will be encouraged to drink water and activity beverages. All personnel shall advise their supervisor when they believe their level of fatigue or exposure to environment conditions approaches a level that could adversely affect themselves, their crew or the operation. Personnel shall also remain aware of the health and safety of other members of their crew and promptly inform the company officer when crew members require rehabilitation or relief from assigned duties.

# **Validation Summary**

# **Revision History**

5/8/2015 Updated for format, no content changes. .

#### **References:**

Personnel Rehabilitation (2008). Poudre Fire Authority Operational Directives, Section 2.3.6, p.1-2

B-Shifter – Rehab versus Recycle

# Firefighter Rehab Form

	Incident #						Date	/	/ Ur	nit	
Name							Time In	:		ime Out	:
Time	B/P	Pulse	RR	SaO2	СО	Skin	Temp	Cap Refill	GCS	Lung Sounds	Pupils
:	/			%	%						
:	/			%	%						
:	/			%	%						
Name							Time In	:		ime Out	:
Time	B/P	Pulse	RR	SaO2	СО	Skin	Temp	Cap Refill	GCS	Lung Sounds	Pupils
:	/			%	%						
:	/			%	%						
:	/			%	%						
								ı			
Name											
							Time In	:		ime Out	:
Time	B/P	Pulse	RR	SaO2	СО	Skin		: Cap Refill			: Pupils
	B/P /	Pulse	RR	SaO2	CO %	Skin	In	Cap		Out Lung	
Time		Pulse	RR			Skin	In	Cap		Out Lung	
Time :	/	Pulse	RR	%	%	Skin	In	Cap		Out Lung	
Time :	/	Pulse	RR	% %	%	Skin	In Temp	Cap	GCS	Out Lung Sounds	
Time :	/	Pulse	RR	% %	%	Skin	In	Cap Refill	GCS	Out Lung Sounds	
Time :	/	Pulse	RR	% %	%	Skin	In Temp	Cap Refill	GCS	Out Lung Sounds	Pupils
Time : : : : Name	/ /			% % %	% % %		In Temp  Time In	Cap Refill	GCS	Ut Lung Sounds  Time Out Lung	Pupils :
Time : : : : : : : : : : : : : : : : : : :	/ / / B/P			% % % SaO2	% % %		In Temp  Time In	Cap Refill	GCS	Ut Lung Sounds  Time Out Lung	Pupils :
Time : Name Time :	/ / / / B/P /			% % % SaO2 %	% % % CO		In Temp  Time In	Cap Refill	GCS	Ut Lung Sounds  Time Out Lung	Pupils :
Time : : Name Time :	/ / / / / B/P / /			% % % SaO2 % %	% % % CO % %		In Temp  Time In	Cap Refill	GCS	Ut Lung Sounds  Time Out Lung	Pupils :

Time	B/P	Pulse	RR	SaO2	СО	Skin	Temp	Cap Refill	GCS	Lung Sounds	Pupils
:	/			%	%						
:	/			%	%						
:	/			%	%						