**Rehab Procedure -Draft**

 **Adopted** September 2018 **Updated:**

The Polk County Fire Chief’s Association has adopted a standardized procedure for Rehabilitation Procedures. The intent is to have each fire department respond in a like manner for the safety purposes of all personnel in the event of a mutual aid call.

**Definition** Rehabilitation – An area outside the fire ground perimeter where crews can go for rest, nourishment, comfort, and medical evaluation.

**NFPA 1584 A. 6.2.6** Medical monitoring is the process of monitoring members who are at risk of suffering adverse health or safety effects. Vital sign measurements must be interpreted in context of the overall appearance and health status of the member. The fire department physician or appropriate medical authority should establish medical protocols and procedures with parameters regarding the following:

(1) Immediate transport to an emergency medical facility

(2) Close monitoring and treatment in rehabilitation

(3) Release from rehabilitation

Currently, there are no studies that quantify vital sign measurements with the length of rehabilitation or with the need to direct members to a treatment area. Visual signs and symptoms remain the best method to evaluate members in the rehabilitation area. Vital sign measurements can be used as a baseline and can assist to identify other health or safety concerns.

**Guideline:**

This procedure shall apply to emergency operations and training exercises of extended

duration where strenuous physical activity or exposure to extreme heat or cold exists. Since individual departments may have specific policies for on-the job injuries or sending personnel to medical facilities for follow-up, the Incident Commander should make notification to the Chief of the department regarding any transport of personnel or removal of personnel from active firefighting duty due to health concerns raised during medical monitoring in rehab.

**Establishing Rehab**

Shall commence whenever emergency operations or training exercises pose a safety or

health risk to members

1. Designated area by IC or EMS crew / officer

2. Heat stress index >90ºF or wind-chill index <10ºF

3. Characteristics for site location of Rehab:

a. Sufficient distance from the effects of the operation so that members can
 safely remove their PPE, provide protection from environmental conditions
 including vehicle exhaust and can be afforded physical and mental rest.

b. Large enough for multiple crews and rehab personnel.

c. Easy access to:

i. EMS transport

ii. SCBA fill station

4. Shall include Medical monitoring and treatment.

**Personnel**

1. Level of EMT certification: EMT minimum

2. Level of staffing

a. I – Minimal hydration needed for training and extended extrications -

Minimum one EMS unit / crew. Consider additional resources depending on number of participants

b. II – Structure fire, hazmat incident, emergency scene with PPE / hazardous

atmosphere – Minimum of one EMS units / crew. Consider additional resources depending on number of Fire and EMS personnel on scene, workload and weather conditions

**Rehab Resources: Call Polk County EMA or other resources early**

1. Fluids – H2O, activity beverage (electrolyte replacement) and ice
2. Food – high energy bars, crackers, soup, broth, stew, oranges, bananas
3. Medical Equipment - BP cuffs, stethoscopes, thermometers, RAD 57, cardiac monitor, IV fluids, transport unit(s)
4. Other Equipment - Rehab cards, sharpies, coolers, blankets, towels, wipes, tarps, fans, traffic cones, barricade tape, (other items as City specific)

**Rehab Implementation**

1. Crews shall be rotated as necessary to allow for rehabilitation.

2. A 20-minute rehab time will be used for a firefighter:

a. After use of second 30-minute SCBA cylinder

b. After a **single** 45 minute or 60-minute SCBA cylinder

c. After 40 minutes of intense work without SCBA

3. Times may be adjusted by an Officer or Rehab supervisor. Officers should re-evaluate

their crews every 45 minutes.

**Rehab Guidelines**

1. Accountability: All members entering / leaving rehab shall be assigned by IC and tracked through the system.
2. Hydration:
	1. 1-quart H2O / hour
	2. During heat stress 50/50 mixture of H2O and activity beverage to replace electrolytes
	3. No caffeine or carbonated beverages
3. Nourishment:
	1. Food for extended incidents (≥ 3 hours) for caloric replacement
	2. Soup, broth, stew, apples, oranges, bananas, or granola bars, power bars
	3. No salty or fatty foods
4. Active cooling: hand and forearm immersion, misting fans, ice vests
5. Passive cooling: remove PPE, move to cool environment, cool wet towels
6. Warming: Add clothing, wrap themselves in blankets or use other methods to regain

normal body temperature.

**Medical monitoring** - Ongoing evaluation of members who are at risk of suffering adverse

effects from stress or from exposure to heat, cold, or hazardous environment.

1. Vital Signs: Repeat every 15 minutes
2. BP:
	1. Diastolic >100
		1. No S/S = observe extra 15 minutes
		2. Re-hydrate / rest / recheck
		3. S/S = consider transport
		4. After 30 minutes still > 100, removed from active firefighting duty
	2. Systolic >160
		1. Re-hydrate / rest 30 minutes / recheck
		2. After 30 minutes still >160 = remove from active firefighting duty
3. Pulse:
	1. HR ≥ 100 beat per minute
		1. Hydrate / rest 15 minutes / recheck
		2. Still ≥ 100 bpm
		3. Rest additional 15 minutes
		4. If after 30 min still above 100 bpm remove from active firefighting duty
4. Temp:
	1. 101º F (Normal temp 98.6° f – 100.6°F)
	2. Remove protective clothing and cool until < 100 º F
	3. After rest / cooling period still > 101º F with S/S = consider transport
5. CO Level: If CO monitoring is available
	1. Dependent upon signs and symptoms.
	2. If signs or symptoms present consider transport.
	3. OR if CO level is 12% or > follow the Hampson SpCO Triage Algorithm.

(Chart in RAD 57) 0-5 for non-smokers and 5-10 for smokers

Symptomatic members or members with abnormal findings shall receive additional monitoring

during rehab.
 **Documentation**

1. Rehab time in and out must be documented.
2. Track all vitals and times on the tracking cards.
3. Transfer tracking card information to the chart after the call or on scene if time allows.
4. If emergency medical care is provided – a medical report shall be generated and a copy

provided to the Incident Commander.

 **Reassignment**

1. When released by the rehab supervisor.
2. Rehab supervisor has the authority to keep members in rehab or transport them for

further medical evaluation or treatment, **regardless of rank (if warranted).**

1. Members shall not return to operations:
	1. If he/she does not feel adequately rested
	2. If the rehab supervisor sees evidence of medical, psychological, or emotional

distress

* 1. If the member appears otherwise unable to safely perform his/her duties
	2. If one or more crew members is seriously injured or killed during an incident, all members of the crew shall be removed from the emergency responsibilities at the incident as soon as possible.