

These protocols were written with the help of Dr. Kevin Sipprell who is a fire fighter and the medical director for Ridgeview Ambulance Service in Waconia, MN.

Rehab protocol: **For Fire Dept**

- 1) Rehab entry criteria
 - a. Use of two 30 min SCBA cylinders or one 45-60 min cylinder
 - b. 45 min of intense physical labor
 - c. Use of encapsulating Haz-Mat suit
 - d. When directed by officer, paramedic or self
 - e. Consider lower threshold for extreme heat/humidity (i.e. one 30 min cylinder OR 20 min intense physical labor)
- 2) Procedure
 - a. Check in with rehab division officer
 - i. Obtain tracking card (if applicable)
 - b. Remove turn-out gear/SCBA
 - c. Sector officer assesses pulse/mental status/symptoms
 - i. Immediate EMS assessment if Pulse > 220-age(nearest 10) OR chest pain, fainting, altered mental status, vomiting, severe shortness of breath
 - d. Rest/rehydrate for 15 min
 - i. Drink 8-12 oz fluid
 - e. Active cooling/warming (per weather conditions)---{can be further clarified}
 - f. Sector officer monitors mental status, speech, gait, skin color/temp, respiratory effort
 - i. **Any lack of gradual improvement or worsening condition warrants EMS evaluation**
 - ii. **Injury/Burns and officer discretion may also prompt EMS evaluation**
- 3) Exit assessment (must meet all criteria below)
 - a. HR<110
 - b. RR≤20
 - c. Skin temperature normal (or near normal for conditions)
 - d. Normal gait/speech/mental status
 - e. No shortness of breath, C/P, lightheadedness
- 4) Failed exit criteria
 - a. Additional 15 min rest/rehydration
 - b. If exit criteria not met after 30 min, EMS assessment

EMS guidelines for Fire rehab

Note: the guidelines below are written for ALS services. All EMS agencies must obtain approval from their medical director before implementing any medical protocols. The key point of these protocols are to allow EMS crews the option to monitor a Fire fighter or responder (when medically appropriate) rather than be limited to a typical treat and transport protocol.

- 1) Establish communication w/ IC or rehab division officer
- 2) Stage ambulance near rehab
 - a. Consider egress and potential for additional incoming fire apparatus
- 3) Perform focused assessment including complete set of vital signs and temperature(if applicable)
 - a. Consider 12-lead ECG
 - b. Consider Blood Glucose check
 - c. Consider transcutaneous CO measurement if avail. (see attached protocol)
 - i. Administer high flow O2 immediately if concern for CO toxicity regardless of level or ability to measure
- 4) Immediate transport for:
 - a. Symptoms of C/P, severe SOB, altered mental status and syncope
 - b. HR > 220-age, SBP<100, RR>30, SaO2<85%
 - c. Treatment for immediate transport
 - i. IV, O2, monitor, 12-lead ECG
 - ii. Consider hydroxocobalamin (Cyanokit) administration (separate protocol)
- 5) Begin active cooling/warming based on weather conditions
- 6) Provide oral rehydration 8-12 oz/10 min
- 7) Reassess after 10 min.
 - a. Vital signs
 - b. Symptoms to assess for include:
 - i. C/P, dizziness, shortness of breath, weakness, nausea/vomiting, headache, cramps, change in behavior/speech, unsteady gait
 - c. If improving and asymptomatic, monitor until exit criteria met(see below)
 - i. Minimum 20 min. rest/rehydration time
 - ii. Offer transportation, if refused, document per service specific guidelines
 - d. If worsening or symptomatic, transport
 - i. IV, O2 Monitor, 12-lead, BG-check
 - ii. Consider hydroxocobalamin (Cyanokit) administration (per service specific guidelines)
- 8) "May return to work" criteria (must meet/document all below)
 - a. Transport offer declined
 - b. Normal speech/mental status, steady gait
 - c. Normal Vital signs
 - i. HR<110, RR<20, SBP>100, DBP<100, SaO2>95%, Skin temp -normal(or measured < 101.5°), CO<10(if applicable)
 - d. Asymptomatic

e. Paramedic discretion

Fire Dept Rehab Protocol – Flow chart

