

# Western Regional Emergency Medical Advisory Committee

<b>Title: Incident Scene Rehabilitation</b>	<b>Policy #2017-01</b>
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<b>Effective Date:</b>	3/15/17								
<b>Reviewed:</b>									
<b>Updated:</b>									

<b>Policy:</b>	<b>Incident Scene Rehabilitation</b>
<b>Procedure:</b>	<p><b><u>Establishing Rehab</u></b></p> <ul style="list-style-type: none"> <li>• Establish rehab for incidents which are large, of long duration, labor intensive, or in extreme environmental conditions, including heat stress index &gt;90 F or wind chill &lt;10 F (see attached charts).</li> <li>• Locate rehab out of extremes of temperature and weather (ie- shaded, sheltered area), and out of view of the scene.</li> <li>• Rehab to consist of a rehab and a medical sector. Staff rehab ideally with 1 EMT per 5 firefighters in rehab; staff medical sector with a dedicated ALS ambulance and crew for transport from scene.</li> </ul> <p><b><u>Frequency and Duration of Rehab</u></b></p> <ul style="list-style-type: none"> <li>• Working with a SCBA             <ul style="list-style-type: none"> <li>○ Ideally after 30 minutes- at least 10 minutes of rest in rehab</li> <li>○ At minimum after 45-60 minutes- at least 20 minutes of rest in rehab</li> </ul> </li> <li>• Physical exertion without a SCBA             <ul style="list-style-type: none"> <li>○ Ideally after 20 minutes of physical exertion- at least 10 minutes of rest in rehab</li> <li>○ At minimum after 40 minutes of physical exertion- at least 20 minutes of rest in rehab</li> </ul> </li> </ul> <p><b><u>Rehab Policy</u></b></p> <ul style="list-style-type: none"> <li>• Firefighters should remove PPE on arrival to aid passive cooling.</li> <li>• Medical assessment on arrival to rehab             <ul style="list-style-type: none"> <li>○ Mental status: if abnormal (alterations in mental status, speech, or behavior), send to medical sector for evaluation.</li> <li>○ Review of systems: ask about chest pain, shortness of breath, dizziness, headache, nausea, or vomiting. If any positive, send to medical sector for evaluation.</li> </ul> </li> <li>• Rest for at least time described above.</li> <li>• Rehydration can include cool water and sports drinks as desired, or warm broth in cold weather. Energy bars should be available for nutrition. Avoid caffeinated or carbonated drinks.</li> </ul>

- In hot weather, have towels soaked in ice water available for active cooling. Sanitize in bleach solution (1/4 cup bleach per gallon water) then rinse in plain water between each use.
- Repeat medical assessment after rest period, before return to work.
  - Repeat mental status assessment and review of systems. If abnormal send to medical sector for evaluation.
  - Measure pulse by palpation for 30 seconds.
    - Pulse < 110 and mental status/ review of systems normal - may return to work.
    - Pulse > 110
      - Rest for additional 10 minutes and check a full set of vital signs including pulse, blood pressure, and oral temperature. If abnormal, repeat 10 minutes of rest followed by full set of vital signs, up to 3 times total (30 min additional rest).
      - Pulse should be <110, blood pressure <160/100, and temperature <100.6.
      - If all vital signs are below these limits at any time on repeat, may return to work after a repeat check of mental status and review of systems.
      - If pulse, temperature, or blood pressure are still above these limits after third check (30 minutes additional rest), send to medical sector for evaluation.

Reference:

## NOAA's National Weather Service

### Heat Index

Temperature (°F)

Relative Humidity (%)	Temperature (°F)															
	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

**Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity**

Caution     
  Extreme Caution     
  Danger     
  Extreme Danger

<b>U.S. Customary Wind Chill Chart</b>												
Estimated Wind Speed in MPH	Actual Thermometer Reading (F)											
	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
	Equivalent Temperature (F)											
Calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-21	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-36	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-124
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
(Wind speeds greater than 40 mph have little additional effect)	<b>LITTLE DANGER*</b> <small>(for properly clothed person)</small>			<b>INCREASED DANGER*</b> <small>(for properly clothed person)</small>				<b>GREAT DANGER*</b>				
	*DANGER FROM FREEZING OF EXPOSED FLESH											