

		<u>HEAT STRESS INDEX</u>								
		Relative Humidity								
T		10%	20%	30%	40%	50%	60%	70%	80%	90%
E	104	98	104	110	120	132				
M	102	97	101	108	117	125				
P	100	95	99	105	110	120	132			
E	98	93	97	101	106	110	125			
R	96	91	95	98	104	108	120	128		
A	94	89	93	95	100	105	111	122		
T	92	87	90	92	96	100	106	115	122	
U	90	85	88	90	92	96	100	106	114	122
R	88	82	86	87	89	93	95	100	106	115
E	86	80	84	85	87	90	92	96	100	109
	84	78	81	83	85	86	89	91	95	99
F	82	77	79	80	81	84	86	89	91	95
	80	75	77	78	79	81	83	85	86	89
	78	72	75	77	78	79	80	81	83	85
	76	70	72	75	76	77	77	77	78	79
	74	68	70	73	74	75	75	75	76	77

Note: Add 10F when protective clothing is worn and add 10F when in direct sunlight.

Humidity Index F	Danger Category	Injury or Threat
Below 60 F	None	Little or no danger under normal circumstances
80 – 90 F	Caution	Fatigue possible if exposure is prolonged and there is physical activity
90 – 105 F	Extreme Caution	Heat cramps and heat exhaustion possible if exposure is prolonged and there is physical activity
105 – 130 F	Danger	Heat cramps or exhaustion likely, heat stroke possible if exposure is prolonged and there is physical activity
Above 130 F	Extreme Danger	Heat Stroke Imminent!!

WIND CHILL INDEX

		Temperature Degrees Fahrenheit												
		45	40	35	30	25	20	15	10	5	0	-5	-10	-15
W	5	43	37	32	27	22	16	11	6	0	-5	-10	-15	-21
I	10	34	28	22	16	10	3	-3	-9	-15	-22	-27	-34	-40
N	15	29	23	16	9	2	-5	-11	-18	-25	-31	-38	-45	-51
D	20	26	19	12	4	-3	-10	-17	-24	-31	-39	-46	-53	-60
S	25	23	16	8	1	-7	-15	-22	-29	-36	-44	-51	-59	-66
P	30	21	13	6	-2	-10	-18	-25	-33	-41	-49	-56	-64	-71
E	35	20	12	4	-4	-12	-20	-27	-35	-43	-52	-58	-67	-75
E	40	19	11	3	-5	-13	-21	-29	-37	-45	-53	-60	-69	-76
D	45	18	10	2	-6	-14	-22	-30	-38	-46	-54	-62	-70	-78

MEDICAL ASSESSMENT CRITERIA

MENTAL STATUS:

- Alert and oriented on arrival at rehab

If any alteration in mental status – Provide Immediate Assessment, contact Medical Control and consider additional medical evaluation and/or transport

HEART RATE:

- < 110 BPM = Within normal limits
- > 100 BPM = Close monitoring required by medical personnel after 20 minutes

Normal = < 100 BPM 10 minutes after arrival in Rehab

SKIN CONDITION:

- May be somewhat flushed on arrival. Should be improved five minutes after arrival in Rehab.
- If skin remains flushed or is unusually dry, monitor patient for signs of heat stress/stroke.

BLOOD PRESSURE:

- Systolic Pressure < 150 and Diastolic Pressure < 100
- Systolic Pressure > 160 and Diastolic Pressure \geq 100 = Close monitoring by medical personnel

Normal: Systolic Pressure < 140 and Diastolic Pressure < 90 ten minutes after arrival in Rehab

Abnormal: Systolic Pressure >160 or Diastolic > 100 after 20 minutes in Rehab – Contact Medical Control and consider additional medical evaluation and/or transport

RESPIRATIONS:

- < 26 = Within normal limits
- < 20 = Five minutes after arrival in Rehab

Abnormal: \geq 26 after 10 minutes in Rehab

TEMPERATURE:

- < 100.6 = Within normal limits
- > 100.6 up to 100.9 = Close monitoring and cooling required by medical personnel

> 101 = Provide cooling, contact Medical Control and strongly consider possible Transport

REHAB FLOW CHART

INITIAL ACTIONS for REHAB TEAM

1. Document: "Firefighters Name", "Unit #" and "Time In"
2. Remove Protective Equipment (Be sensitive to environmental conditions and sheltering)
3. Begin rehab process (Fluids and snacks)

INITIAL ACTIONS for EMS TEAM

1. Baseline assessment:
 - Mental Status
 - Skin Condition
 - Vitals: Pulse, Blood Pressure, Respirations, Temperature, Pulse Oximetry

Medical Assessment within normal limits?

Medical Assessment not within normal limits?

1. Hydrate orally with 20 oz of fluid.
2. Implement passive cooling measures with sensitivity toward environment.
3. Rest for 20 minutes
4. Medically Assessment within normal limits?

1. Consider the need to move to EMS Protocol.
2. Implement active cooling.
3. Hydrate with 32 oz of fluid.
4. Rest for 20 minutes
5. Medically reassess every 5 minutes until baseline assessment returns to normal.

Release from Rehab

Medical Assessment within normal limits?

Medical Assessment not within normal limits?

Release from Rehab

1. Consider the need to move to EMS Protocol and contact Medical Control.
2. Continue active cooling.
3. Continue hydration adding a commercially prepared sport drink.
4. Rest for 10 minutes
5. Assess Glucose level
 - If hypoglycemic, provide nourishment
6. Medically reassess every 5 minutes until baseline assessment returns to normal.

Medical Assessment within normal limits?

Medical Assessment not within normal limits?

Release from Rehab

1. Move to EMS Protocol
2. Contact Medical Control
3. Transport for medical evaluation at E.R.
4. Notify I/C with name of FF and Department

Personnel returning for second round of rehab should be hydrated with sports drink and provided nourishment.

PACIFIC FIRE PROTECTION DISTRICT
Incident Rehab - Individual Rehabilitation Report

Incident Location _____ Date _____ Time _____ Rehab Officer _____

Name/Unit #	Time In/Out	# SCBA Cylinders	Exam Period	BP	Pulse	Resp	SAO2	Temp	Skin	COOLING / HEATING	HYDRATION / NOURISHMENT	MEDICAL COMPLAINTS	Trans. Y / N
			INITIAL										
			10 Min.										
			20 Min.									(Glucose ____)	
			30 Min.									(Glucose ____)	
			INITIAL										
			10 Min.										
			20 Min.									(Glucose ____)	
			30 Min.									(Glucose ____)	
			INITIAL										
			10 Min.										
			20 Min.									(Glucose ____)	
			30 Min.									(Glucose ____)	
			INITIAL										
			10 Min.										
			20 Min.									(Glucose ____)	
			30 Min.									(Glucose ____)	
			INITIAL										
			10 Min.										
			20 Min.									(Glucose ____)	
			30 Min.									(Glucose ____)	