POLICY: SCENE REHABILITATION

Hadley Township Fire Department
Policy #106

I. PURPOSE

To ensure that the physical and mental conditions of employees operating at the scene of an emergency or a training exercise are protected at all times.

II. RESPONSIBILITIES

A. Incident Commander

The Incident Commander shall make adequate provisions early in the incident for the rest and rehabilitation for all members operating at the scene. These provisions shall include but is not limited to: medical evaluation, treatment and monitoring, food and fluid replenishment, mental rest, and relief from extreme climatic conditions. The rehabilitation should include the provision of Emergency Medical Services (EMS) at the Basic Life Support (BLS) level or higher.

B. Supervisors

All supervisors shall maintain an awareness of the condition of each member operating within their span of control. Adequate steps shall be taken to provide for each member's safety and health.

C. Personnel

During any emergency incident or training evolution, all members shall advise their supervisor when they believe that their level of fatigue or exposure to heat or cold is approaching a level that could affect their own personal safety. Fluid replenishment is encouraged throughout the operation members shall also use their best efforts to remain aware of the health and safety of other members of their crew.

III. ESTABLISHMENT OF REHABILITATION SECTOR

A. Responsibility

The Incident Commander will establish a Rehabilitation Sector when conditions indicate. A member will be placed in charge of the sector and shall be known as the Rehab Officer.

B. Location

The location for the Rehabilitation Area will be identified, considering the following criteria.

The location should be far enough away from the scene that members may safely remove their turnout gear and SCBA and be afforded physical and mental rest from the stress and pressure of the emergency operation or training evolution.

The location should provide suitable protection from the prevailing environmental and extreme climatic conditions. During hot weather, it should be in a cool, shaded area. During cold weather, it should be in a warm, dry area.

The location should be large enough to accommodate crews, based on the size of the incident.

The location should be easily accessible by EMS units.

C. Preferred Site Designations for Rehabilitation Area

A nearby garage, building lobby, or other structure.

A school bus or municipal bus.

Fire apparatus, ambulance, or other emergency vehicles.

An open area in which a rehab area can be created using tarps, fans, etc.

D. Preferred Resources

Fluids – water, activity beverage, oral electrolyte solutions and ice.

Food – sandwiches, soup, broth, or stew.

Medical - blood pressure cuffs, stethoscopes, oxygen administration devices, cardiac monitors, intravenous solutions, thermometers, and trauma kit.

Other - awnings, smoke ejectors, heaters, dry clothing, floodlights, blankets and towels.

IV. GUIDELINES

A. Rehabilitation Sector

1. Rehabilitation should be considered by command during the initial planning stages of an emergency response. The climatic or environmental conditions of the emergency scene should not be the sole justification for establishing a Rehabilitation Area. Any activity/incident that is large in size, long in duration, and/or labor intensive will rapidly deplete the energy and strength of personnel and therefore merits consideration for rehabilitation.

2. Climatic or environmental conditions that indicate the need to establish a Rehabilitation Area are a heat stress index above 90F (see table 1-1) or wind-chill index below 10F (see table 1-2).

B. Hydration

The department should provide fluids at the scene of an incident or training. A critical factor in the prevention of heat injury is the maintenance of fluids and electrolytes. Fluids must be replaced during exercise periods and at emergency incidents. During heat stress, the members should consume at least one quart of fluids per hour. The rehydration solution should be a commercially prepared activity beverage and administered at about 40F°. Alcohol is forbidden. Caffeine beverages and carbonated beverages should also be avoided.

C. Nourishment

The department should provide food at the scene of an incident when units are engaged for three or more hours and/or harsh environmental conditions warrant it. The department should provide food at a training scene when units are engaged for five or more hours and/or harsh environmental conditions warrant it. A cup of soup, broth, or stew is highly recommended because it is digested much faster than sandwiches and fast food products. In addition, foods such as apples, oranges, and bananas provide supplemental forms of energy replacement. Fatty and/or salty foods should be avoided.

D. Reimbursement

The department shall reimburse employees for any expenditures incurred from providing hydration and nourishment as outlined above.

E. Rest & Recovery

The "two air bottle rule," or 60 minutes of work time, is recommended as an acceptable level prior to rehabilitation. Members shall rehydrate (at least eight fluid ounces) while SCBA cylinders are being charged. Fire fighters having worked for two full 30 minute rated bottles, or 60 minutes, shall be immediately placed in the Rehabilitation Area for rest and evaluation. Rest shall not be less than ten minutes and may exceed an hour as determined by the Rehab Officer. Fresh crews, or crews released from the Rehabilitation Sector/Group, shall be available in the Staging Area to ensure that fatigued members are not required to return to duty before they are rested, evaluated, and released by the Rehab Officer.

1. Rehab shall be provided and staffed by the highest licensed EMS personnel on the scene. They shall evaluate vital signs, examine members, and make proper disposition (return to duty, continued rehabilitation, or medical treatment and transport to medical facility). Continued rehabilitation should consist of additional monitoring of vital signs, providing rest, and providing fluids for rehydration. Medical treatment for member's, whose signs and/or symptoms indicate potential problems, should be provided in accordance with local medical control procedures.

2. Documentation - All medical evaluations shall be recorded on a standard EMS run form. The Medical Officer or his/her designee must sign this form. This information should be documented on forms approved by local medical control, if applicable. See attached forms for additional information.

HEAT STRESS INDEX

RELATIVE HUMIDITY

°F	10%	20%	30%	40%	50%	60%	70%	80%	90%
104	98	104	110	120	132				
102	97	101	108	117	125				
100	95	99	105	110	120	132			
98	93	97	101	106	110	125			
96	91	95	98	104	108	120	128		
94	89	93	95	100	105	111	122		
92	87	90	92	96	100	106	115	122	
90	85	88	90	92	96	100	106	114	122
88	82	86	87	89	93	95	100	106	115
86	80	84	85	87	90	92	96	100	109
84	78	81	83	85	86	89	91	95	99
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 10°F when protective clothing is worn and add 10°F when in direct sunlight.

HUMITURE °F	DANGER CATEGORY	INJURY THREAT
BELOW 60°	NONE	LITTLE OR NO DANGER UNDER NORMAL CIRCUMSTANCES
80° - 90°	CAUTION	FATIGUE POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
90° - 105°	EXTREME CAUTION	HEAT CRAMPS AND HEAT EXHAUSTION POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
105° - 130°	DANGER	HEAT CRAMPS OR EXHAUSTION LIKELY, HEAT STROKE POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
ABOVE 130°	EXTREME DANGER	HEAT STROKE IMMINENT!

Heart Rate and Temperature - The heart rate should be measured for 30 seconds as early as possible in the rest period. If a member's heart rate exceeds 110 beats per minute, an oral temperature should be taken. If the member's temperature exceeds 100.6F, he/she should not be permitted to wear protective equipment. If it is below 100.6F and the heart rate remains above 110 beats per minute, rehabilitation time should be increased. If the heart rate is less than 110 beats per minute, the chance of heat stress is negligible. In addition to these vital signs special attention should be paid to the responders respirations and skin condition.

REHAB SECTOR: COMPANY CHECK-IN / OUT SHEET

Crews operating on the scene:____

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UNIT #	# PERSONS	TIME IN	TIME OUT	UNIT #	# PERSONS	TIME IN	TIME OUT