

Meiners Electric, Company Safety Manual		PAGE: 1 of 4
LAST REVISION: June 18th, 2012	REVIEWED BY: L. Kirk Berglund, Safety Director	FORM REF No: SP-HEAT
SUBJ: Controlling Heat Related Injuries		

Controlling Heat Related Injuries

1). Policy

It is the Policy of Meiners Electric to provide a safe and healthful work environment to all our employees.

Workers exposed to hot and humid conditions are at risk of heat illnesses, especially those doing heavy work tasks or using bulky protective clothing and equipment. Some workers might be at greater risk than others if they have not built up a tolerance to hot conditions. To this end, the following requirements to control heat related injuries shall be implemented.

2). Responsibilities of Support Personnel.

Support Personnel (Management Staff, Safety and Purchasing) shall assist Crew Leaders in obtaining the training, resources and materials needed to ensure a safe work site prior to the job start. Support Personnel will also work with our clients to setup schedules that limit exposure and/or provide for climate controlled break area(s) as applicable.

3). Responsibilities of the Crew Leader.

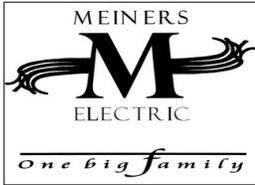
Before starting any activities, obtain the latest weather information on temperature and humidity. Use the Heat Index Matrix to determine the Heat Index and Create Your Action Plan.

Your Action Plan may include, but is not limited to:

1. Insuring that there is plenty of potable water available.
2. Allow time for crew member to buildup a tolerance to the heat
3. Utilizing mechanical ventilation to promote air flow.
4. Selecting air conditioned break areas or areas that provide shade from the sun..
5. Institute crew rotations to limit exposure.
6. Increasing the frequency of breaks.
7. Changing the start and stop times for jobs.
8. What to do in the event of a heat related injury.

4). Responsibilities of the Crew.

No matter how good an Action Plan is, it cannot in itself effectively eliminate the chance of heat related injuries. It is the responsibility of every crew member to ensure not only their well being but also that of their fellow workers.



Meiners Electric, Company Safety Manual

PAGE: 2 of 4

LAST REVISION:

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Crew members should:

1. Drink plenty of water to ensure that you stay hydrated.
2. Limit the consumption of caffeinated drinks such as sodas, coffee, tea, etc.
3. If you need a break to rehydrate yourself or cool down, do not hesitate to ask your crew leader. Chances are, you are not the only one needing a break.
4. Do not over exert yourself, keep a steady work pace.
5. Report to your crew leader any possible heat injury symptoms.
6. Observe those working around you for signs of heat related symptoms.

Identification and Care of Heat Related Injuries

1). HEAT CRAMPS

Heat cramps are muscle pains or spasms, usually in the abdomen, arm and legs that may occur in association with strenuous activity. Heat cramps are brought on by the depletion of the body's salts and moisture.

What to do:

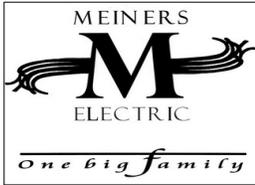
1. Stop all activity and sit quietly in a cool place.
2. Drink clear juice or a sports drink
3. Do not return to strenuous activity for a few hours after the cramps subside. Further exertion could lead to Heat Exhaustion or Stroke. Seek medical attention if cramps do not subside in 1 hour.

2). HEAT EXHAUSTION

Heat exhaustion can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids. It is the body's response to excessive loss of water and salt.

Warning Signs:

1. Heavy sweating
2. Paleness
3. Fainting
4. Tiredness
5. Weakness
6. Nausea or vomiting
7. Headache



Meiners Electric, Company Safety Manual		PAGE: 3 of 4
LAST REVISION: June 18th, 2012	REVIEWED BY: L. Kirk Berglund, Safety Director	FORM REF No: SP-HEAT
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What to do:

1. Stop all activity and sit quietly in a cool place. (Preferably in an Air Conditioned area)
2. Rest
3. Take a cool shower, bath or a sponge bath to reduce body temperature.
4. Remove excess clothing.
5. Seek medical attention if symptoms worsen or last longer than 1 hour.

3). HEAT STROKE

Heat stroke occurs when the body is unable to regulate it's temperature. The body's temperature rises rapidly, the sweating mechanism fails and the body is unable to cool down. Body temperature may rise to 106 F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided.

Warning Signs:

- | | | |
|--|-----------------------|-----------------------|
| 1. High body temperature (Above 103F) | 4. Rapid strong pulse | 7. Unconsciousness |
| 2. Red, hot and dry skin (No sweating) | 5. Throbbing headache | 8. Nausea or vomiting |
| 3. Dizziness | 6. Confusion | |

What to do:

If you see any of these symptoms, you may be dealing with a life threatening emergency. Have someone call for immediate medical services and begin cooling the victim.

1. Get the victim to as shady or air conditioned area.
2. Cool the victim rapidly by immersion in water, shower, etc.
3. Monitor the victims body temperature and continue cooling efforts until the victim's body temperature is below 102 F.
4. Get medical assistance immediately.



Meiners Electric, Company Safety Manual		PAGE: 4 of 4
LAST REVISION: June 18th, 2012	REVIEWED BY: L. Kirk Berglund, Safety Director	FORM REF No: SP-HEAT
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 Heat Index Matrix (Relative Humidity)													
	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
110°	136												
108°	130	137											
106°	124	130	137										
104°	119	124	131	137									
102°	114	119	124	130	137								
100°	109	114	118	124	129	136							
98°	105	109	113	117	123	128	134						
96°	101	104	108	112	116	121	126	132					
94°	97	100	103	106	110	114	119	124	129	135			
92°	94	96	99	101	105	108	112	116	121	126	131		
90°	91	93	95	97	100	103	106	109	113	117	122	127	132
88°	88	89	91	93	95	98	100	103	106	110	113	117	121
86°	85	87	88	89	91	93	95	97	100	102	105	108	112
84°	83	84	85	86	88	89	90	92	94	96	98	100	103
82°	81	82	83	84	84	85	86	88	89	90	91	93	95
80°	80	80	81	81	82	82	83	84	84	85	86	86	87

Category	Heat Index	Possible Heat Disorders
Extreme Danger	130 Degrees or Higher	Heat Stroke or Sunstroke Likely
Danger	105-129 Degrees	Sunstroke, muscle cramps and/or heat exhaustion likely. Heatstroke possible with prolonged exposure and/or physical activity.
Extreme Caution	90-100 Degrees	Sunstroke, muscle cramps and/or heat exhaustion possible with prolonged exposure and/or physical activity.
Caution	80-90 Degrees	Fatigue possible with prolonged exposure and/or physical activity.