



# HEAT ILLNESS PREVENTION PLAN

The following designated person or persons (Program Administrator Safety Coordinator/ Supervisor/Foreman/Field Supervisor/Crew Leader) have the authority and responsibility for implementing the provisions of this program at this worksite.

## Name/Title/Phone Number

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## Provision of Water

- Drinking water containers will be brought to the site, so that at least two quarts per employee are available at the start of the shift. All workers, whether working individually or in smaller crews, will have access to drinking water.
- As part of the HIPP, the water quantities will be checked every hour and more frequently when the temperature rises.
- Containers will be refilled with a water supply when the water level within a container drops below 50 percent. Additional water will be available on site to replenish the container as needed.
- Water containers will be located as close as practicable to the areas where employees are working (given the working conditions and layout of the worksite), to encourage the frequent drinking of water. If field terrain prevents the water from being placed as close as possible to the workers, bottled water or personal water containers will be made available, so that workers can have drinking water readily accessible.



## Access to Shade

- Shade structures will be opened and placed as close as practical to the workers when the Temperature equals or exceeds 80 degrees Fahrenheit.
- Enough shade structures will be available at the site to accommodate employees who are on a break at any point in time. During meal periods there will be enough shade for all the employees who choose to remain in the general area of work or in areas designated for recovery and rest periods.
- Shade structures will be relocated to follow along with the crew and they will be placed as close as practical to the employees, so that access to shade is provided at all times. All employees on a break or meal period will have full access to shade so they can sit in a normal posture without having to be in physical contact with each other.
- Situations where trees or other vegetation are used to provide shade, the thickness and shape of the shaded area will be evaluated, before assuming that sufficient shadow is being cast to protect employees.
- Situations where it is not safe or feasible to provide shade (mobile equipment and vehicle hazards, high winds), a note will be made of these unsafe or unfeasible conditions, and of the steps that will be taken to provide alternative cooling measures but with equivalent protection as shade.
- Daily, workers will be informed of the location of the shade structures and will be encouraged to take a cool-down break if they are experiencing heat stress symptoms. An employee who takes a preventative cool-down break will be monitored and asked if he/she is experiencing symptoms of heat illness and in no case will the employee be ordered back to work until signs or symptoms of heat illness have abated.

## Monitoring the Weather

- The supervisor will check in advance the extended weather forecast. Weather forecasts can be checked with the aid of the internet (<http://www.nws.noaa.gov/>), or by calling the National Weather Service phone numbers (see AZ numbers below) or by checking the Weather Channel TV Network. The work schedule will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected.

### Arizona Weather Service Contact Info:

NWS Phoenix- (602) 275-7418  
NWS Flagstaff-(928) 556-9161  
NWS Tucson-(520)670-6526



## Heat Illness Prevention

- Prior to each workday, the forecasted temperature and humidity for the worksite will be reviewed and will be compared against the National Weather Service Heat Index (Fig. 1) to evaluate the risk level for heat illness. Determination will be made of whether or not workers will be exposed at a temperature and humidity characterized as either “extreme caution” or “extreme danger” for heat illnesses. It is important to note that the temperature at which these warnings occur must be lowered as much as 15 degrees if the workers under consideration are in direct sunlight.
- Prior to each workday, the supervisor will monitor the weather (using <http://www.nws.noaa.gov/> or with the aid of a simple thermometer, available at most hardware stores) at the worksite. This critical weather information will be taken into consideration to determine when it will be necessary to make modifications to the work schedule (such as stopping work early, rescheduling the job, working at night or during the cooler hours of the day, increasing the number of water and rest breaks).
- A thermometer will be used at the jobsite to monitor for sudden increases in temperature, and to ensure that once the temperature exceeds 80 degrees Fahrenheit, shade structures will be opened and made available to the workers.
- Each employee will be assigned a “buddy” to be on the lookout for signs and symptoms of heat illness and to ensure that emergency procedures are initiated when someone displays possible signs or symptoms of heat illness.
- Effective communication by voice, direct observation, mandatory buddy system, or electronic means will be maintained so that employees at the worksite can contact a supervisor when necessary. If the supervisor is unable to be near the workers (to observe them or communicate with them), then an electronic device, such as a cell phone or text messaging device, may be used for this purpose if reception in the area is reliable
- Frequent communication will be maintained with employees working by themselves or in smaller groups (keep tabs on them via phone or two-way radio to be on the lookout for possible symptoms of heat illness. The employee(s) will be contacted regularly and as frequently as possible throughout the day, since an employee in distress may not be able to summon help on his or her own.
- Effective communication and direct observation for alertness and/or signs and symptoms of heat illness will be conducted frequently. When the supervisor is not available, a designated alternate responsible person must be assigned to look for signs and symptoms of heat illness. If a supervisor, designated observer, or any employee reports any signs or symptoms of heat illness in any employee, the supervisor or designated person will take immediate action commensurate with the severity of the illness.



## Emergency Response

- All foremen and supervisors will carry cell phones or other means of communication to ensure that emergency medical services can be called. Checks will be made to ensure that these electronic devices are functional prior to each shift.
- When an employee is showing symptoms of possible heat illness, steps will be taken immediately to keep the stricken employee cool and comfortable once emergency service responders have been called (to reduce the progression to more serious illness). Under no circumstances will the affected employee be left unattended.
- During a heat wave or hot temperatures, workers will be reminded and encouraged to immediately report to their supervisor any signs or symptoms they are experiencing.

## Handling a Sick Employee

- When an employee displays possible signs or symptoms of heat illness, a trained first aid worker or supervisor will check the sick employee and determine whether resting in the shade and drinking cool water will suffice or if emergency service providers will need to be called. A sick worker will not be left alone.
- When an employee displays possible signs or symptoms of heat illness and no trained first aid worker or supervisor is available at the site, emergency service providers will be called.
- The Berg Group also utilized a phone triage system that will assist in the diagnosis and care of an employee that is experiencing possible heat illness symptoms. Contact info below:

**WORKPARTNERS**  
**1-800-359-5020**



Fig. 1

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: red; margin-right: 5px;"></div> <span>Extreme Danger</span> </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: orange; margin-right: 5px;"></div> <span>Danger</span> </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: yellow; margin-right: 5px;"></div> <span>Extreme Caution</span> </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #c0c0c0; margin-right: 5px;"></div> <span>Caution</span> </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #e0e0e0; margin-right: 5px;"></div> <span>Most common in AZ</span> </div> </div>																					
°F	RELATIVE HUMIDITY (%)																				
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
140	125																				
135	120	128																			
130	117	122	131																		
125	111	116	123	131	141																
120	107	111	116	123	130	139	148														
115	103	107	111	115	120	127	135	143	151												
110	99	102	105	108	112	117	123	130	137	143	150										
105	95	97	100	102	105	109	113	118	123	129	135	142	149								
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95	87	88	90	91	93	94	96	98	101	104	107	110	114	119	124	130	136				
90	83	84	85	86	87	88	90	91	93	95	96	98	100	102	106	109	113	117	122		
85	78	79	80	81	82	83	84	85	86	87	88	89	90	91	93	95	97	99	102	105	108
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75	69	69	70	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80
70	64	64	65	65	66	66	67	67	68	68	69	69	70	70	70	71	71	71	71	71	72



Fig. 2

NWS - Phoenix	Ken Waters <a href="mailto:ken.waters@noaa.gov">ken.waters@noaa.gov</a>	(602) 275-7002 x223	<ul style="list-style-type: none"> <li>• Excessive heat watches and warnings</li> <li>• Data on temperature, data on heat watches and warnings</li> <li>• Educational and preparedness messages</li> <li>• Monsoon Awareness Week</li> </ul>	Heat Watches/Warnings, Safety Info, Statistics, Climatology <a href="http://www.wrh.noaa.gov/psr/general/safety/heat/">http://www.wrh.noaa.gov/psr/general/safety/heat/</a>
NWS - Tucson	Ken Drozd <a href="mailto:Kenneth.drozd@noaa.gov">Kenneth.drozd@noaa.gov</a>	(520) 670-5156 x223	<ul style="list-style-type: none"> <li>• Heat safety promotion</li> <li>• Monsoon Awareness Week</li> <li>• Excessive heat watches and warnings</li> <li>• Outreach events</li> <li>• Weather safety talks</li> </ul>	Keep Up-To-Date <a href="http://www.facebook.com/US.NationalWeatherService.Tucson.gov">http://www.facebook.com/US.NationalWeatherService.Tucson.gov</a> <a href="https://www.twitter.com/NWSTucson">https://www.twitter.com/NWSTucson</a> <a href="http://www.youtube.com/NWSTucson">http://www.youtube.com/NWSTucson</a>  Beat the Heat pamphlet <a href="http://www.wrh.noaa.gov/twc/Heat%20Pamphlet.pdf">http://www.wrh.noaa.gov/twc/Heat Pamphlet.pdf</a>
NWS - Flagstaff	<a href="mailto:w-fgz.webmaster@noaa.gov">w-fgz.webmaster@noaa.gov</a>	(928) 556-9161	<ul style="list-style-type: none"> <li>• Watches and warnings</li> <li>• Forecasts</li> <li>• Weather safety resources</li> </ul>	<a href="http://www.wrh.noaa.gov/fgz/">http://www.wrh.noaa.gov/fgz/</a>