HEAT ILLNESS—Beat the Heat to Stay Alive

Thousands of employees become sick and in some cases die, each year from working in the heat. According to the Occupational Safety and Health Administration (OSHA), there were 31 heat-related worker deaths and 4,120 heat-related worker illnesses in 2012. These illnesses and deaths have a devastating impact on employees, their families and the companies they work for. Federal and state workplace safety laws require employers to protect their employees from known hazards on the job, including heat illness. The costs of not acting to prevent these injuries and deaths are far too great to ignore. Everest has prepared this alert to help you prevent your firm and employees from becoming one of these statistics.

HEAT

Many people are exposed to heat on the job, either outdoors or in hot indoor environments. Operations involving outdoor work in the sun, high air temperatures, radiant heat sources, high humidity, direct physical contact with hot objects, or strenuous physical activities have a high potential for causing heat-related illness. The following table provides examples of locations and activities where employees can be exposed to excessive heat.

<table>
<thead>
<tr>
<th>OUTDOORS</th>
<th>INDOORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Event / Site Security</td>
<td>♦ Commercial Kitchens, Bakeries, Confectioneries, Food Canneries</td>
</tr>
<tr>
<td>♦ Amusement and Theme Parks</td>
<td>♦ Laundry Facilities</td>
</tr>
<tr>
<td>♦ Family Entertainment Centers</td>
<td>♦ Boiler Rooms</td>
</tr>
<tr>
<td>♦ Fairs, Festivals and Carnivals</td>
<td>♦ Non-air-conditioned Warehouses</td>
</tr>
<tr>
<td>♦ Special Events and Challenge Races</td>
<td>♦ Fleet / Auto Shops</td>
</tr>
<tr>
<td>♦ Zip Lines and Aerial Courses</td>
<td>♦ Electrical Utility Rooms</td>
</tr>
<tr>
<td>♦ Motor Sports</td>
<td>♦ Iron, Steel, and Nonferrous Foundries</td>
</tr>
<tr>
<td>♦ Agricultural and Farm Work</td>
<td>♦ Brick-firing, Ceramic Plants, and Glass Products Facilities</td>
</tr>
<tr>
<td>♦ Construction</td>
<td>♦ Rubber Products Factories</td>
</tr>
<tr>
<td>♦ Oil and Gas Well Operations</td>
<td>♦ Chemical Plants</td>
</tr>
<tr>
<td>♦ Refineries</td>
<td>♦ Smelters</td>
</tr>
<tr>
<td>♦ Landscaping</td>
<td>♦ Steam Tunnels</td>
</tr>
<tr>
<td>♦ Mining sites</td>
<td>♦ Asbestos Removal</td>
</tr>
<tr>
<td>♦ Emergency Response Operations</td>
<td></td>
</tr>
<tr>
<td>♦ Hazardous Waste Site Activities</td>
<td></td>
</tr>
<tr>
<td>♦ Road Work</td>
<td></td>
</tr>
<tr>
<td>♦ Airport Tarmacs</td>
<td></td>
</tr>
<tr>
<td>♦ Delivery</td>
<td></td>
</tr>
</tbody>
</table>
WHAT IS HEAT ILLNESS?
When the body temperature rises, the body normally cools itself by circulating blood closer to the skin and through sweating. High humidity environments or excess clothing can prevent the body from cooling. In addition, labor intensive activities in hot environments can raise body temperatures beyond the level that normally can be cooled by sweating.

Initial signs of heat illness including extreme thirst, dizziness, headache, nausea, vomiting, rash (Heat Rash), cramps (Heat Cramps), and fainting (Heat Syncope). The later stage of heat illness is Heat Exhaustion, which is marked by profuse sweating, clammy skin, and extreme fatigue. The most serious stage of heat illness is Heat Stroke, often marked by confusion, loss of consciousness, seizures, and the inability to sweat. When the body loses its ability to sweat, it is at a critical point that requires immediate medical attention. Failure to provide emergency medical care can be fatal.

RISK FACTORS THAT CAN PROMOTE HEAT ILLNESS
A combination of environmental and job-specific factors can increase the risk of developing heat illness. Be aware of the following risk factors, which often work in combination to increase the heat load on the body.

<table>
<thead>
<tr>
<th>Category</th>
<th>Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>High temperature and humidity – Heat Index</td>
</tr>
<tr>
<td></td>
<td>Radiant heat sources</td>
</tr>
<tr>
<td></td>
<td>Contact with hot objects</td>
</tr>
<tr>
<td></td>
<td>Direct sun exposure (with no shade)</td>
</tr>
<tr>
<td></td>
<td>Limited air movement (no breeze, wind or ventilation)</td>
</tr>
<tr>
<td>Job-Specific</td>
<td>Physical exertion</td>
</tr>
<tr>
<td></td>
<td>Use of bulky or non-breathable protective clothing and equipment</td>
</tr>
<tr>
<td></td>
<td>Lack of acclimatization to heat</td>
</tr>
<tr>
<td>Personal / Employee Risk Fac-</td>
<td>Poor physical condition or health problems</td>
</tr>
<tr>
<td>tors</td>
<td>Medications (e.g., blood pressure) or antihistamines</td>
</tr>
<tr>
<td></td>
<td>Pregnancy</td>
</tr>
<tr>
<td></td>
<td>Lack of recent exposure to hot working conditions</td>
</tr>
<tr>
<td></td>
<td>Previous heat-related illness</td>
</tr>
<tr>
<td></td>
<td>Advanced age (65+)</td>
</tr>
</tbody>
</table>

EMPLOYER REQUIREMENTS
Employers are required to protect their employees from known hazards on the job, including heat illness. There are several heat illness prevention activities that employers should review for implementation. State regulations vary; however, most states with their own OSHA plans require employers to follow standards at least as stringent as those set forth by the Federal OSHA.
Heat Illness can be prevented by creating a written Heat Illness Prevention Program to address these primary prevention areas:

- **Temperature / Weather Monitoring**
- **High Heat Procedures**
- **Water Availability**
- **Rest Breaks**
- **Shade / Cooling**
- **Acclimatization**
- **Emergency Procedures**
- **Employee / Supervisory Training**

**Temperature / Weather Monitoring:**
Maintaining an awareness of the expected temperature and relative humidity for your work environment is an essential part of preventing heat illness.

For outdoor environments, the U.S. National Oceanographic and Atmospheric Administration (NOAA) has developed the heat index system. The heat index combines both air temperature and relative humidity into a single value that indicates the “feels like” temperature in degrees Fahrenheit. The higher the heat index, the hotter the weather will feel, and the greater the risk that outdoor workers will experience heat-related illness. Exposure to full sunshine can increase heat index values by up to 15° F. NOAA issues heat advisories as the heat index rises. To learn more about the heat index, click here visit [NOAA’s website](http://www.noaa.gov).

Evaluate the heat index for upcoming weeks to plan work accordingly. Adjust work activities to start earlier in the day, or adjust the workload so that heavier work is scheduled for the morning and lighter job tasks are planned during the latter (cooler) part of the day. Some states have a trigger temperature point associated with the heat index rating. OSHA advises employers to activate their heat illness prevention plan when the heat index temperature is equal to or above 80°F. Check your state regulations for guidance on the trigger temperature.

**High Heat Procedures:**
All employers should develop specific workplace procedures for implementation during hot weather or work in hot environments. These procedures should set forth the employer’s standard procedures for protecting employees from heat illness. See the [Sample Heat Illness Prevention Program](http://www.osha.gov) at the end of this alert, pages 7-12, for additional information on what should be included.

**Water:**
Clean, cool water should be provided to employees, as close as possible to the worksite. If your operations move throughout the day, the water should be moved as needed to be close to the working area.
Water should be cool, clean, and potable. It may be necessary to add ice. Containers should also be sealed to prevent tampering or contamination. If large water containers are provided, they should be stored on an elevated surface and not on the ground. Cups for use should be disposable to prevent contamination. If employees bring their own reusable drinking containers, the containers should be cleaned and sanitized prior to each use. Employees should be trained to stay hydrated, and reminded to drink water prior to arriving at work and every 15 minutes on average during the shift. With water consumption, there is a need for restroom facilities, which should be provided near the worksite.

Rest:
Rest breaks are essential, especially when the heat index is high. Breaks should be built into the daily work schedule, allowing employees time to rest to avoid overexertion and cool down away from the heat. If employees detect heat stress symptoms in themselves or others, encourage them to report it immediately so a rest break can be taken before symptoms get worse.

Shade / Cooling:
Shade is defined as the blockage of sunlight, and includes areas shaded by trees or canopies, as well as air-conditioned buildings and vehicles. Shaded areas should be clean, and situated away from other hazards (such as carbon monoxide from vehicles or generators) and away from heat sources (hot equipment). Where possible, set up work in the shade. Shaded areas can be at least 10 degrees or more cooler than non-shaded work areas. Rest periods must always be provided in the shade. There should be enough shade options to accommodate all the employees taking a break at one time. Even when working in the shade, the temperature can still be high enough to cause heat stress. Examples include non-air-conditioned buildings, garages, and work areas such as boiler rooms. See the suggestions under Engineering Controls for ways to keep shaded areas cool. Portable cooling devices such as water misters may also be used. Temporary worksite structures such as trailers can be air-conditioned to provide a “cool down” area for workers.

Acclimatization:
OSHA studies have determined that one of the primary risk factors for heat fatalities is the lack of acclimatization programs. Allow your employees to acclimatize to the high heat conditions for at least 14 days. Gradually increase their workload to allow them to build-up their tolerance for high heat working conditions. This is especially important for new employees, or employees returning to work from an extended absence. Establish plans for heat waves and the introduction of work in high heat locations or operations. During extreme heat conditions or high heat advisories, you should consider stopping all outside work for the day.

Emergency Procedures:
Identifying and responding to heat-related illness symptoms can be the critical factor between life or death. Accident investigations have shown that employers with standard emergency procedures have much better outcomes when employees suffer heat-related illnesses. The use of a buddy system can help employees watch out for each other and ensure prompt reporting of symptoms to supervisors and crew leaders. If your worksite involves new construction or is difficult to find, print directions to ex-
pedite an emergency response. If an employee is sent home for heat-related illness symptoms, require a medical evaluation prior to sending them home. These steps can minimize the impact of heat illness and prevent a fatality.

Employee / Supervisory Training:
Even the most thorough Heat Illness Prevention Program is of little value if your staff does not know what it involves and how to use it. Train your employees to identify heat illness symptoms in themselves and others. Train employees in CPR-First Aid-AED, heat illness response, and procedures for contacting emergency medical services in case of an emergency. Make heat illness prevention part of your regular safety meetings.

ADDITIONAL MEASURES FOR HEAT ILLNESS PREVENTION
The best way to prevent heat-related illness is to make the work environment cooler. A variety of engineering controls can reduce workers' exposure to heat:

- Air conditioning (such as air-conditioned cabs, or air conditioning in break rooms)
- Increased general ventilation
- Cooling fans
- Water misters
- Local exhaust ventilation at points of high heat production or moisture
- Reflective shields to redirect radiant heat
- Insulation of hot surfaces (such as furnace walls)

Employers should also implement safe work practices to reduce the risk of heat illness:

- Evaluate physical work demands and reduce them during hot weather; schedule heavier work for cooler times of the day
- Permit workers to distribute the workload evenly over the day and incorporate work/rest cycles
- Rotate job functions among workers to help minimize overexertion and heat exposure
- Help new and returning workers become acclimated to hot weather; gradually increase workloads and allow more frequent breaks during the first two weeks of work
- Provide adequate potable (safe for drinking) cool water close to the work area, and encourage employees to drink 2 cups every 15 minutes
- Workers should be alert for symptoms of heat-related illness and trained to administer appropriate first aid to anyone who is developing a heat-related illness
- Encourage the use of a buddy system and encourage employees to be alert for heat illness symptoms in each other
- Have an emergency plan for dealing with an employee who shows signs of heat-related illness and requires medical attention

Workers should be aware that the use of certain personal protective equipment (e.g., certain types of respirators and impermeable clothing) can increase the risk of heat-related illness. Guidance on clothing and cooling devices can protect workers in hot environments:

- Employees should wear light-colored clothing made of a breathable fabric (e.g., cotton)
- Vests worn over clothing should be loose enough to allow air flow to cool the body
- In some workplaces, insulated gloves, insulated suits, reflective clothing, or infrared-reflecting face shields may be needed to protect against the heat
Heat Illness—Beat the Heat to Stay Alive

April 2015

Thermally conditioned clothing might be used for extremely hot conditions; for example:

- A garment with a self-contained air conditioner in a backpack
- A garment with a compressed air source that feeds cool air through a vortex tube
- A plastic jacket whose pockets can be filled with dry ice or containers of ice

Workers and supervisors should receive training in the hazards of heat exposure and their prevention that includes topics such as:

- Risk factors for heat-related illness
- Different types of heat-related illness, including how to recognize common signs and symptoms
- Heat-related illness prevention procedures
- First aid procedures for heat-related illness
- How to contact emergency medical services
- Acclimatization, how it is developed, and how your worksite procedures address it
- Immediate reporting of signs or symptoms of heat-related illness to the supervisor
- Hydration and drinking small quantities of water frequently
- Availability of clear and precise directions to the worksite for emergency medical response personnel

Sources used for this publication and additional information on heat illness prevention:

- Federal OSHA Heat Illness Page
- Federal OSHA Quick Card
- Cal OSHA Sample Procedures
- NIOSH Protecting Workers from Heat Illness Deaths
- OSHA’s Heat App
- OSHA Industry Specific Resources

Remember, Everest Loss Control offers services to help you in your loss prevention efforts. If you would like more information about these services, visit our web site at www.everestregroup.com.

Loss Control is a daily responsibility of your individual management. This publication is not a substitute for your own loss control program. The information that is provided in this Alert should not be considered as all encompassing, or suitable for all situations, conditions, or environments. Each organization is responsible for implementing their safety/injury/illness prevention program and should consult with legal, medical, technical, or other advisors as to the suitability of using the information contained in this Alert. The information contained in this publication is intended for general informational purposes only and is not intended to constitute legal advice or opinions. You should contact an attorney if you need legal advice and/or you have any questions concerning your obligations under any law, statute and/or code identified in this publication. ©Everest National Insurance Company 2015

CONTACT US

Westgate Corporate Center
477 Martinsville Road
P.O. Box 830
Liberty Corner, NJ 07938-0830

Loss Control Department
Phone: 908-604-3000
Fax: 908-604-3526
E-mail: losscontrol@everestre.com

Everest focuses on specialty property and casualty insurance business and is licensed to conduct business in all 50 states, including the District of Columbia. Everest is rated A+ XV (Superior) by A.M. Best. To learn more about Everest, visit our website at: www.everestregroup.com.
Sample Heat Illness Prevention Program

Please note:

These procedures provide the minimal steps applicable to most outdoor work settings and are essential to reducing the incidence of heat-related illnesses. In working environments with a higher risk for heat illness (e.g., during a heat wave, or other severe working or environmental conditions), it is the employer’s duty to exercise greater caution and additional protective measures beyond what is listed in this document, as needed, to protect their employees. To effectively establish your company procedures, carefully review the key elements listed on this document, as well as the examples provided, then use the procedures applicable to your workplace. Implement and train employees and supervisors on your company procedures and follow-up to ensure your procedures are being followed.

Furthermore, to successfully tailor these procedures to your work activities, evaluate and consider the individual conditions present at your worksite, including, but not limited to:

- Size of the crew
- Length of the work-shift
- Ambient temperature (which can be taken either with the aid of a simple thermometer or by monitoring the weather)
- Current heat index / relative humidity
- The presence of personal protective equipment or additional sources of heat

Again, these sample procedures do not include every workplace scenario, so it is crucial that your company evaluate and take into account conditions found in your individual workplace that are likely to cause a heat illness.

Your written procedures should also:

- Identify the designated person(s) that has been assigned the applicable task(s) (e.g. supervisor, foreman, safety coordinator, crew leader).

- Provide specific details required to carry out the task and ensure that the task is accomplished successfully (e.g., number and size of water containers/shade structures of what size, distance to placement, frequency of water-level replenishment/weather-tracking/water breaks/reminders, etc.).

- Specify how these procedures will be communicated to all your employees and specifically to persons assigned these responsibilities (e.g. via training, meeting), and how this company policy and procedures are adhered to.

Procedures for Provision of Water (include but are not limited to the following):

- Drinking water containers (of five to 10 gallons each) 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 small crews, will have access to drinking water.
Paper cone rims or bags of disposable cups and the necessary cup dispensers will be made available to workers and will be kept clean until used.

As part of the Effective Replenishment Procedures, the water level of all containers will be checked periodically (e.g., every hour, every 30 minutes), and more frequently when the temperature rises. Water containers will be refilled with cool water, when the water level within a container drops below 50 percent. Additional water containers (e.g., five gallon bottles) will be carried to replace water as needed.

Ice will be carried in separate containers so that, when necessary, it will be added to the drinking water to keep it cool.

Water containers will be placed as close as possible to the workers (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 workers can have drinking water readily accessible.

Water containers will be relocated as the crew moves so drinking water will remain readily accessible.

Water containers will be kept in sanitary condition.

Workers will be reminded daily of the location of the water coolers and of the importance of drinking water frequently. When the temperature exceeds or is expected to exceed 90°F, brief ‘tailgate’ meetings will be held each morning to review with employees the importance of drinking water, the number and schedule of water and rest breaks and the signs and symptoms of heat illness.

Audible devices (such as whistles or air horns) will be used to remind employees to drink water.

When the temperature equals or exceeds 95°F, or during a heat wave, the number of water breaks will be increased, and workers will be reminded throughout the work shift to drink water.

During employee training and tailgate meetings, the importance of frequently drinking water will be stressed.

![Procedures for Access to Shade (include but are not limited to the following):](image)

Note: Follow the general guidance provided above, under the Provisions for Water (identify the person assigned the task and list the specific tasks that have to be carried out)

Shade structures will be opened and placed as close as practical to the workers when the temperature equals or exceeds 85°F. When the temperature is below 85°F, access to shade will be provided promptly when requested by an employee. Note: The interior of a vehicle may not be used to provide shade unless the vehicle is air-conditioned and the air conditioner is on and the vehicle is cool.

Enough shade structures will be available at the site to accommodate at least 25 percent of the employees on the shift at any one time.

Workers will be informed daily of the location of the shade structures and will be encouraged to take no less than a five minute cool-down rest in the shade when feeling overheated.

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.
In situations where it is not safe or feasible to provide access to shade (e.g., during high winds), a note will be made of these unsafe or unfeasible conditions and of the steps that will be taken to provide shade upon request.

For non-agricultural employers, in situations where it is not safe or feasible to provide shade, 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 the equivalent protection of shade.

Procedures for Monitoring the Weather (include but are not limited to):

- The supervisor will be trained and instructed on how to check the extended weather forecast in advance of the scheduled work. 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 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. This type of advance planning should take place whenever there is the potential for high temperatures (will vary geographically).

- Prior to each workday, the forecasted temperature and humidity for the worksite will be reviewed and a heat index value will be determined according to the NOAA Heat Index guidelines to evaluate the risk level for heat illness. A heat index value falling within the “extreme caution”, “danger” or “extreme danger” ranges will necessitate a careful review of the scheduled work for that day. It is important to note that exposure to full sunshine can increase heat index values by up to 15°F.

- Prior to each workday, the supervisor will monitor the weather (using http://www.nws.noaa.gov/ or with the aid of a simple thermometer) at the worksite. This critical weather information will be used 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, or 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 85°F, shade structures will be opened and made available to the workers. In addition, when the temperature equals or exceeds 95°F, additional preventive measures such as the High Heat Procedures will be implemented.

Handling a Heat Wave:

- During a heat wave or heat spike, the work day will be cut short or rescheduled (example conducted at night or during cooler hours).

High Heat Procedures are additional preventive measures that this company will use when the temperature equals or exceeds 95°F.

- Effective communication by voice, observation, 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 (via phone or two-way radio) to monitor them for possible symptoms of heat illness.
Employees will be observed for alertness and signs and symptoms of heat illness. When the supervisor is not available, an alternate responsible person may be assigned to look for signs and symptoms of heat illness. Such a designated observer will be trained on what steps to take if heat illness occurs.

- Employees will be reminded throughout the work shift to drink plenty of water.
- New employees will be closely supervised, or assigned a “buddy” or more experienced coworker for the first 14 days of the employment (unless the employee indicates at the time of hire that he or she has been doing similar outdoor work for at least 10 of the past 30 days for four or more hours per day).

### Procedures for Acclimatization (include but are not limited to):

Acclimatization is the temporary and gradual physiological change in the body that occurs when the environmentally induced heat load to which the body is accustomed is significantly and suddenly exceeded by sudden environmental changes. In more common terms, the body needs time to adapt when temperatures rise suddenly, and an employee risks heat illness by not taking it easy when a heat wave strikes or when starting a new job that exposes the employee to heat to which the employee’s body hasn’t yet adjusted. Inadequate acclimatization can be significantly more perilous in conditions of high heat and physical stress. Employers are responsible for the working conditions of their employees, and they must act effectively when conditions result in sudden exposure to heat their employees are not used to.

- The weather will be monitored daily. The supervisor will be on the lookout for sudden heat wave(s), or increases in temperatures to which employees haven’t been exposed to for several weeks or longer.
- **During a heat wave or heat spike, the work day will be cut short (for example, 12 noon), will be rescheduled (for example, conducted at night or during cooler hours) or, if at all possible, ceased for the day.**
- For new employees, the intensity of the work will be lessened during a two-week break-in period (such as scheduling slower-paced, less physically demanding work during the hot parts of the day and the heaviest work activities during the cooler parts of the day (early-morning or evening). Steps taken to lessen the intensity of the workload for new employees will be documented.
- The supervisor will be extra-vigilant with new employees and stay alert to the presence of heat related symptoms.
- New employees will be assigned a “buddy” or experienced coworker to watch each other closely for discomfort or symptoms of heat illness.
- During a heat wave, all employees will be observed closely (or maintain frequent communication via phone or radio), to be on the lookout for possible symptoms of heat illness.
- Employees and supervisors will be trained on the importance of acclimatization, how it is developed and how these company procedures address it.

### Procedures for Emergency Response (include but are not limited to):

- Prior to assigning a crew to a particular worksite, workers and the foreman will be provided a map of the site, along with clear and precise directions (such as streets or road names, distinguishing features and distances to major roads), to avoid a delay of emergency medical services.
Prior to assigning a crew to a particular worksite, efforts will be made to ensure that a qualified and appropriately trained and equipped person is available at the site to render first aid, if necessary.

Prior to the start of the shift, a determination will be made of whether or not a language barrier is present at the site and steps will be taken (such as assigning the responsibility to call emergency medical services to the foreman or an English-speaking worker) to ensure that emergency medical services can be immediately called in the event of an emergency.

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).

At remote locations such as rural farms, lots or undeveloped areas, the supervisor will designate an employee or employees to physically go to the nearest road or highway where emergency responders can see them. If daylight is diminished, the designated employee(s) shall be given reflective vest or flashlights in order to direct emergency personnel to the location of the worksite, which may not be visible form the road or highway.

During a heat wave or hot temperatures, workers will be reminded and encouraged to immediately report to their supervisor any heat illness signs or symptoms they are experiencing.

Employees and supervisors training will include every detail of these written emergency procedures.

**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 in the shade, as he or she can take a turn for the worse!

- 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.

- **Emergency service providers will be called immediately if an employee displays signs or symptoms of heat illness (loss of consciousness, incoherent speech, convulsions, red and hot face), does not look OK or does not get better after drinking cool water and resting in the shade.** While the ambulance is in route, first aid will be initiated (cool the worker: place the worker in the shade, remove excess layers of clothing, place ice pack in the armpits and groin area and fan the victim). Do not let a sick worker leave the site, as they can get lost or die before reaching a hospital!

- If an employee does not look OK and displays signs or symptoms of severe heat illness (loss of consciousness, incoherent speech, convulsions, red and hot face), and the worksite is located more than 20 minutes away from a hospital, call emergency service providers, communicate the signs and symptoms of the victim and request Air Ambulance.
Procedures for Employee and Supervisory Training (include but are not limited to):

- Supervisors will be trained prior to being assigned to supervise other workers. Training will include this company’s written procedures and the steps supervisors will follow when employees’ exhibit symptoms consistent with heat illness. Supervisors will be trained on how to track the weather at the job site (by monitoring predicted temperature highs and periodically using a thermometer). Supervisors will be instructed on how weather information will be used to modify work schedules, to increase number of water and rest breaks or cease work early if necessary.

- All employees and supervisors will be trained prior to working outside. Training will include the company’s written prevention procedures.

- Employees will be trained on the steps that will be followed for contacting emergency medical services, including how they are to proceed when there are non-English speaking workers, how clear and precise directions to the site will be provided and the importance of making visual contact with emergency responders at the nearest road or landmark to direct them to their worksite.

- When the temperature exceeds 75°F, short ‘tailgate’ meetings will be held to review the weather report, to reinforce heat illness prevention with all workers, to provide reminders to drink water frequently, to inform them that shade can be made available upon request and to remind them to be on the lookout for signs and symptoms of heat illness.

- New employees will be assigned a “buddy” or experienced coworker to ensure that they understand the training and follow company procedures.