Hot/Cold Illness Prevention

PURPOSE

The purpose of the Hot/Cold Illness Prevention program is to reduce the risk of work-related illnesses due to extreme temperatures.

SCOPE

This procedure applies year-round to all work being performed in extreme environments.

REQUIREMENTS

All managers and supervisors are responsible for implementing and maintaining the Heat Illness Program in their work areas. At least one employee onsite is required to be CPR and First Aid trained. Supervisors will carry cell phones or other means of communication, to ensure that emergency services can be called and check that these are functional at the worksite prior to each shift.

All employees are to be trained in basic knowledge of hot and cold illnesses and how to identify the signs. Every morning, workers will be reminded about address and directions to the worksite to inform medical responders and emergency procedures. Employees will work in pairs to ensure training understanding and so coworkers can spot the danger signs of hot/cold illnesses quickly.

HOT ILLNESS PREVENTION

Health Risks and Symptoms

Heat Stroke

- Dry, pale skin, sweating may still be present.
- Hot, red skin (looks like a sunburn).
- Mood changes.
- Irritability, confusion, and not making any sense.
- Seizures or fits.
- Collapse (will not respond).

Heat Exhaustion

- Headaches.
- Dizziness, or light-headedness.
- Weakness.
- Mood changes, irritability, or confusion.
- Feeling sick to your stomach, vomiting, fainting.

- Decreased and dark-colored urine.
- Pale, clammy skin.

Control Measures

Each work location involved in working in hot environments shall implement measures that must be in place to control the effects of environmental factors that can contribute to heat related illnesses. The most common environmental factors are air temperature, humidity, radiant heat sources and air circulation.

Physical factors that can contribute to heat related illness shall be taken into consideration before performing a task. The most common physical factors that can contribute to heat related illness are type of work, level of physical activity and duration, clothing color, weight and breathability.

Supervisors must ensure personal factors that contribute to heat related illness are taken into consideration before assigning a task where there is the possibility of a heat-related illness occurring. The most common personal factors that can contribute to heat related illness are age, weight/fitness, drug/alcohol use, and prior heat-related illness.

Each work site shall develop site specific procedures but shall include the minimum:

- Bring at least 2 quarts per employee at the start of the shift and the supervisors/designated persons will monitor water containers every 30 minutes, and employees are encouraged to report to supervisor/designated person low levels or dirty water.
- Supervisors will provide frequent reminders to employees to drink frequently.
- Every morning there will be short tailgate meetings to remind workers about the importance of frequent consumption of water throughout the shift during hot weather.
- Place water containers as close as possible to the workers.
- When drinking water levels within a container drop below 50%, the water shall be replenished immediately, or water levels should not fall below the point that will allow for adequate water during the time necessary to effect replenishment.
- Supervisors will set up an adequate number of umbrellas, canopies or other portable devices at the start of the shift and will relocate them to be closer to the crew, as needed.
- Working hours will be modified to work during the cooler hours of the day, when possible.
- When a modified or shorter work-shift is not possible, more water and cool-down rest breaks will be provided.

- Supervisors will continuously check all employees and stay alert to the presence of heat related symptoms.

  At or above 90°F, a 10-minute cool-down rest period every two hours and close observation to help identify employees showing signs and symptoms of heat-related illness is mandatory. At or above 100°F, the cool-down rest periods must be 15 minutes every hour. These can be taken at the same time with any meal or rest period under wage and hour laws and must be paid unless taken during a meal period.

Provision of Water

- Employees shall have access to suitably cool, potable drinking water. Where it is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift.

Access to Shade

- Employees will be provided with access to shade. Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling. Such access to shade shall be permitted at all times.

COLD ILLNESS PREVENTION

During the winter, construction workers face a natural hazard – cold weather. The colder it gets, the more energy you need to use to stay warm. When it is also windy and raining or snowing, your body uses even more energy and loses heat faster. Working in cold or freezing temperatures for a long time can lead to health problems.

Health Risks and Symptoms

Hypothermia – your temperature drops to 95°F or lower (a normal temperature is 98.6°F). You:

- Shiver and stomp your feet to keep warm.
- Feel unusually tired.
- Lose coordination.
- Become Confused.
- Lose consciousness.

Frostbite – your skin freezes and becomes:

- Red with gray/white patches.
- Numb – you cannot feel the area.
- Blistered (in serious cases).

Trench Foot – your foot is:

- Tingly/Itchy.
- Red and blotchy.
- Swollen and/or numb – you cannot feel your foot.

Risk Mitigation

Dress for the weather and carry extra clothes:

- Inner and outer layers that will keep you dry.
- A hat or hood that covers your ears, and a knit mask if needed.
- Waterproof and insulated gloves.
- Waterproof and insulated steel/composite toe boots.

Drink the right liquids:

- To avoid becoming dehydrated, drink plenty of warm, sweet liquids, such as:
    - Sports drinks
    - Soups
    - Sugar water
- AVOID liquids with caffeine, such as:
    - Coffee
    - Tea
    - Soda
    - Hot chocolate

Be proactive and alert. When working in cold environments for a long period of time:

- Learn the signs and symptoms of cold weather illnesses and injuries.
- Take frequent breaks in a warm area.
- Remember – you are at a higher risk if you take certain medications, are in poor physical condition, or suffer from illnesses such as diabetes, hypertension, or cardiovascular disease.

TRAINING

Training in the following topics shall be provided to all supervisory and non-supervisory employees:

- The environmental and personal risk factors for hot and cold illnesses.

Hot/Cold Illness Prevention

- The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot, and employees are likely to be sweating more than usual in the performance of their duties.
- The importance of frequent consumption of warm, sweet liquids, when the work environment is cold.
- The importance of acclimatization; the process or result of becoming accustomed to a new climate or to new conditions.
- The different types of hot/cold illness and the common signs and symptoms of those illnesses
- The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of illness in themselves, or in co-workers.
- Procedures for responding to symptoms of possible hot/cold illnesses using the 9-Line Emergency Process.

All contractors, subcontractors, staffing companies, etc. employees (including temporary) working outdoors must be trained in heat illness prevention.