



H S E

HEALTH SAFETY ENVIRONMENTAL



Alert #: SA 14-24

Date: 06/24/2024

Heat Stress Prevention

While working in extreme temperatures it is essential to be mindful of heat stress before, during, and after your body has become acclimated to the environment that you are working in. Heat stress occurs when the body’s internal mechanisms for controlling temperature fail to maintain a safe level of heat (most frequently occurring when the body is exposed to high temperatures and/or high humidity, causing the body’s core temperature to rise to dangerous levels). Heat stress can lead to various heat related illnesses, ranging from mild heat exhaustion to severe heatstroke.

To reduce the effects of heat stress during heat waves, workers will need more breaks and rescheduling some of the harder and hotter job tasks. For example, a good safe work practice will be planning physically demanding tasks for the cooler hours of the day. We need to minimize strenuous work to the degree possible after 10 a.m. with the understanding that it is unreasonable to expect all strenuous work to be completed before 10 a.m. In addition to minimizing strenuous work past 10 a.m.: workers should wear lightweight and breathable clothing that covers the skin to protect against direct sunlight, as well as sunscreen with a high SPF for added protection.

With the rising temperatures in mind, the “2:1” rule will be in effect as long as the heat index remains in the “Danger” zone. Meaning for every 30 minutes of work in high heat conditions, workers are required to take at least a 15-minute break in a shaded or cooled area. This ratio will be adjusted as the heat index rises.

With that being said: all workers should monitor themselves and coworkers for symptoms for dehydration and other causes of concern:

• Dehydration:

- Thirst
- Dark Urine
- Decreased Urination
- Dry Mouth and Dry Skin
- Fatigue and Weakness
- Dizziness or Lightheadedness
- Headache
- Muscle Cramps
- Irritability

• Heat Stress:

- Heavy Sweating
- Cool, Moist Skin
- Weakness and Fatigue
- Nausea and Vomiting
- Dizziness and Fainting
- Rapid Pulse
- Confusion or Disorientation
- High Body Temperature
- Flushed Skin
- Dry Skin

SAFETY ALERT

<ul style="list-style-type: none"> • Heat Exhaustion: <ul style="list-style-type: none"> ○ Heavy Sweating ○ Rapid, Shallow Breathing ○ Weakness or Fatigue ○ Nausea or Vomiting ○ Pale or Clammy Skin ○ Dizziness or Headache ○ Muscle Cramps 	<ul style="list-style-type: none"> • Heat Stroke: <ul style="list-style-type: none"> ○ High Body Temperature (above 140F or 40C) ○ Rapid Pulse ○ Hot, Dry Skin (No Sweating) ○ Confusion or Loss of Consciousness ○ Seizures
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If you or someone else exhibits signs of severe heat stress or heat stroke, it's crucial to take immediate action:

- **Move to a cooler, shaded area.**
- **Drink water if conscious and able to swallow.**
- **Apply cool, damp cloths to the skin or use a fan for cooling.**
- **Seek medical attention immediately if symptoms worsen or do not improve.**
- **Contact the Incident Hotline at 1-800-543-5163**

Reactionary measures are not enough to properly mitigate the risks of heat stress. To properly mitigate the risk of Heat Stress, it is critical to properly hydrate and provide your body with the nutrients that it needs to endure a work day.

Properly hydrating your body includes: water/electrolyte replacement drinks consumed at a ratio of 8oz per every 15 minutes of work. If consuming sports drinks, drink 3 bottles of water for every 1 sports drink. Caffeinated/energy drinks should be avoided as they can cause dehydration, ultimately increasing the effects of heat stress.

Properly nourishing your body can also mitigate the effects of heat stress. During lunch breaks, workers should eat food rich in water content and electrolytes to help maintain hydration levels. Eating foods like the ones listed below is perhaps one of the most beneficial actions that can be taken to preventing heat stress, however, it is not the only action that should be taken. Proper implementation of all of the rules and recommendations that have been given throughout this document drastically reduce the effects of heat stress.

<p>Categories of foods that reduce the effects of heat stress:</p> <ul style="list-style-type: none"> • Hydrating Fruits (Watermelon, Cantaloupe, Oranges, etc...) • High-Water Vegetables: (Celery, Lettuce, Tomatoes, Bell Peppers, etc...) • Electrolyte-Rich Foods: (Bananas, Avocados, Spinach, Sweet Potatoes...) • Whole Grains: (Oats, Quinoa, Brown Rice, Whole Wheat Bread) • Lean Proteins: (Chicken, Turkey, Fish, Beans, Lentils) • Nuts and Seeds: Almonds, Chia Seeds, Flaxseeds, Pumpkin Seeds) • Avoid Excessive Sugary or Salty Foods

***Report all incidents immediately to the Hotline
1-855-543-5163.***