



SAFETY GUIDE

Environmental Health & Safety

July 2016

Heat Illness

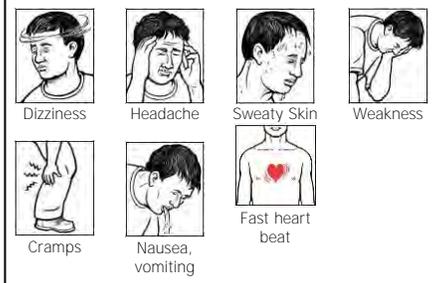
Environmental Health Advisory

HEAT ILLNESS CAN BE DEADLY. The body normally cools itself by sweating. During hot weather, especially with high humidity, sweating isn't enough. Body temperature can rise to dangerous levels if you don't drink enough water and rest in the shade. You can suffer from **heat exhaustion** or **heat stroke**.

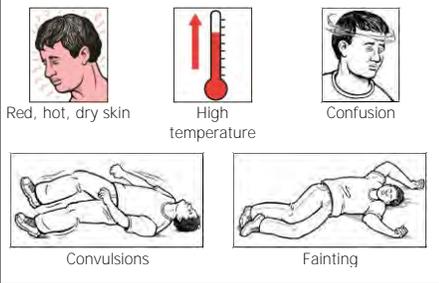
To Prevent Heat Related Illness and Fatalities

- Drink water every 15 minutes, even if you are not thirsty.
- Rest in the shade to cool down.
- Wear a hat and light-colored clothing.
- Learn the signs of heat illness and what to do in an emergency.
- Keep an eye on fellow workers.
- Take it easy on your first days of work in the heat. You need to get used to it.

Heat Exhaustion



Heat Stroke



Using the Heat Index

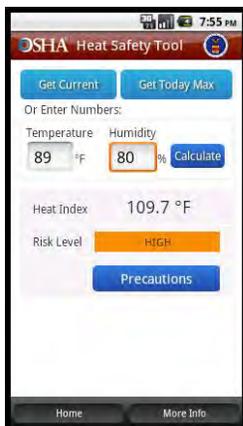
For people working outdoors in hot weather, both air temperature and humidity affect how hot they feel. The "**heat index**" is a single value that takes both temperature and humidity into account. Refer to Page 2 of this guide for the protective measures to take at the different risk levels.

Heat Index	Risk Level	Protective Measures
Less than 91°F	<u>Lower (Caution)</u>	Basic heat safety and planning
91°F to 103°F	<u>Moderate</u>	Implement precautions and heighten awareness
103°F to 115°F	<u>High</u>	Additional precautions to protect workers
Greater than 115°F	<u>Very High to Extreme</u>	Triggers even more aggressive protective measures

Additional Heat Illness Resources

 **WATER. REST. SHADE.**
The work can't get done without them.

www.osha.gov/SLTC/heatillness/index.html



Get it Now!



Heat Safety Tool Smartphone App

- Drink water often
- Rest in the shade
- Report heat symptoms early
- Know what to do in an emergency

Environmental Health & Safety
<https://ehs.stonybrook.edu/>



click on the link to the EH&S Heat Stress Advisory Page to view the current heat index and protective measures.

Stony Brook, NY

82°F Overcast

 WEATHER UNDERGROUND

Southampton, NY

78°F Scattered Clouds

 WEATHER UNDERGROUND

Summary of Risk Levels and Associated Protective Measures

The most critical actions employers should take to help prevent heat-related illness at each risk level:

Heat Index	Risk Level	Protective Measures
<91°F	Lower (Caution)	<ul style="list-style-type: none"> ▪ Provide drinking water ▪ Ensure that adequate medical services are available ▪ Plan ahead for times when heat index is higher, including worker heat safety training ▪ Encourage workers to wear sunscreen ▪ Acclimatize workers <p>If workers must wear heavy protective clothing, perform strenuous activity or work in the direct sun, additional precautions are recommended to protect workers from heat-related illness.*</p>
91°F to 103°F	Moderate	<p>In addition to the steps listed above:</p> <ul style="list-style-type: none"> ▪ Remind workers to drink water often (about 4 cups/hour)** ▪ Review heat-related illness topics with workers: how to recognize heat-related illness, how to prevent it, and what to do if someone gets sick ▪ Schedule frequent breaks in a cool, shaded area ▪ Acclimatize workers ▪ Set up buddy system/instruct supervisors to watch workers for signs of heat-related illness <p>If workers must wear heavy protective clothing, perform strenuous activity or work in the direct sun, additional precautions are recommended to protect workers from heat-related illness.*</p> <ul style="list-style-type: none"> ▪ Schedule activities at a time when the heat index is lower ▪ Develop work/rest schedules ▪ Monitor workers closely
103°F to 115°F	High	<p>In addition to the steps listed above:</p> <ul style="list-style-type: none"> ▪ Alert workers of high risk conditions ▪ Actively encourage workers to drink plenty of water (about 4 cups/hour)** ▪ Limit physical exertion (e.g. use mechanical lifts) ▪ Have a knowledgeable person at the worksite who is well-informed about heat-related illness and able to determine appropriate work/rest schedules ▪ Establish and enforce work/rest schedules ▪ Adjust work activities (e.g., reschedule work, pace/rotate jobs) ▪ Use cooling techniques ▪ Watch/communicate with workers at all times <p>When possible, reschedule activities to a time when heat index is lower</p>
>115°F	Very High to Extreme	<p>Reschedule non-essential activity for days with a reduced heat index or to a time when the heat index is lower</p> <p>Move essential work tasks to the coolest part of the work shift; consider earlier start times, split shifts, or evening and night shifts.</p> <p>Strenuous work tasks and those requiring the use of heavy or non-breathable clothing or impermeable chemical protective clothing should not be conducted when the heat index is at or above 115°F.</p> <p>If essential work must be done, in addition to the steps listed above:</p> <ul style="list-style-type: none"> ▪ Alert workers of extreme heat hazards ▪ Establish water drinking schedule (about 4 cups/hour)** ▪ Develop and enforce protective work/rest schedules ▪ Conduct physiological monitoring (e.g., pulse, temperature, etc) ▪ Stop work if essential control methods are inadequate or unavailable.

*The heat index is a simple tool and a useful guide for employers making decisions about protecting workers in hot weather. It does not account for certain conditions that contribute additional risk, such as physical exertion. Consider taking the steps at the next highest risk level to protect workers from the added risks posed by:

- Working in the direct sun (can add up to 15°F to the heat index value)
- Wearing heavy clothing or protective gear

**Under most circumstances, fluid intake should not exceed 6 cups per hour or 12 quarts per day. This makes it particularly important to reduce work rates, reschedule work, or enforce work/rest schedules.

For more information, go to https://www.osha.gov/SLTC/heatillness/heat_index/protective_measures.html