

REMEMBER!

Heat-related illness can be prevented. OSHA does not have a specific standard that covers working in hot environments. Nonetheless, under the OSH Act, employers have a duty to protect workers from recognized serious hazards in the workplace, including heat-related hazards. This guide helps employers and worksite supervisors prepare and implement hot weather plans. It explains how to use the heat index to determine when extra precautions are needed at a worksite to protect workers from environmental contributions to heat-related illness. **Workers performing strenuous activity, workers using heavy or non-breathable protective clothing, and workers who are new to an outdoor job need additional precautions beyond those warranted by heat index alone.**

Two types of heat illness:

Heat Exhaustion



Heat Stroke



Heat kills – get help right away!

Stay safe and healthy!

Drink water even if you aren't thirsty every 15 minutes



Watch out for each other



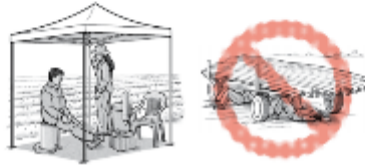
Wear a hat and light colored clothing



Know where you are working in case you need to call 911



Rest in the shade



Heat illness can be prevented!



Water



Shade and Rest



Training



Emergency Plan



**WATER.
REST.
SHADE.**

OSHA Occupational Safety and Health Administration
U.S. Department of Labor

1-800-321-OSHA (6742)
TTY: 1-877-889-5627
www.osha.gov

The work can't get done without them.

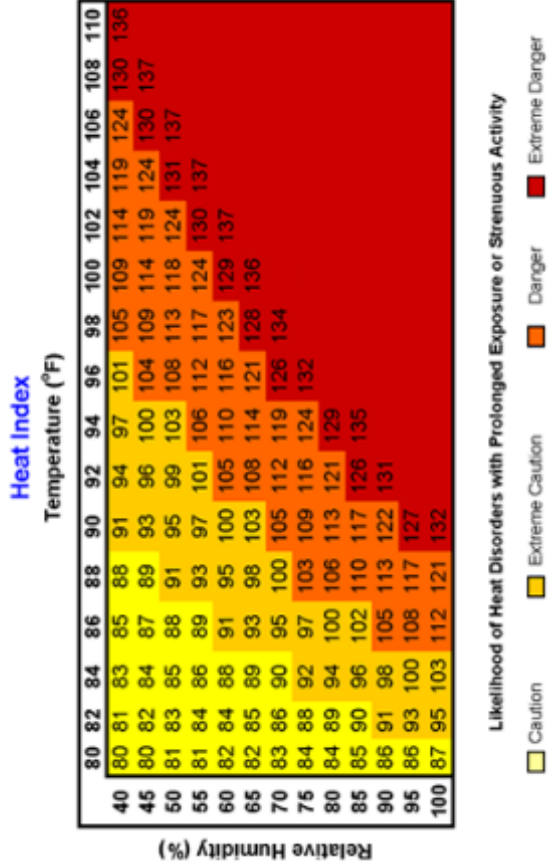
HEAT ILLNESS CAN BE DEADLY.

Remember to:

- Drink water often, even if you aren't thirsty.
- Rest in the shade to cool down.
- Report heat symptoms early.
- Know what to do in an emergency.

Let's make heat safety part of the job. If you have questions, call OSHA. It's confidential. We can help!





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

Recommendations for Lower Risk when HI <91°F

- 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

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.

Recommendations for Moderate Risk when HI is between 91°F to 103°F

- 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

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.*

- Schedule activities at a time when the heat index is lower
- Develop work/rest schedules
- Monitor workers closely

Recommendations for High Risk when HI is between 103°F to 115°F

- 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

When possible, reschedule activities to a time when heat index is lower

Recommendations for Very High Risk when HI >115°F

Reschedule non-essential activity for days with a reduced heat index or to a time when the heat index is lower

Move essential work tasks to the coolest part of the work shift; consider earlier start times, split shifts, or evening and night shifts. 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.

If essential work must be done, in addition to the steps listed above:

- 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.

Plan Element	Heat Index Risk Level			
	Lower (Caution)	Moderate	High	Very High/Extreme
Supplies (ensuring adequate water, provisions for rest areas, and other supplies)	✓	✓	✓	✓
Emergency planning and response (preparing supervisors and crews for emergencies)	✓	✓	✓	✓
Worker acclimatization (gradually increasing workloads; allowing more frequent breaks as workers adapt to the heat)	✓	✓	✓	✓
Modified work schedules (establishing systems to enable adjustments to work schedules)		✓	✓	✓
Training (preparing workers to recognize heat-related illness and preventive measures)	✓	✓	✓	✓
Physiological, visual, and verbal monitoring (using direct observation and physiological monitoring to check for signs of heat-related illness)		✓	✓	✓

Important consideration: NOAA devised the heat index values for shaded conditions and light winds. **Full sunshine can increase heat index values by up to 15° Fahrenheit.** Strenuous work and the use of heavy or specialized protective clothing also have an additive effect. As a result, the risk at a specific heat index could be higher than that listed in the table above if the work is in direct sunlight without a light breeze, or if work involves strenuous tasks or the use of heavy or specialized protective clothing. Extra measures, including implementing precautions at the next risk level, are necessary under these circumstances.