

# Heat Stress in the Workplace

Heat stress occurs when an individual's body cannot eliminate excess heat, negatively impacting their health. Your employees have an increased risk of experiencing a heat-related illness when they work in environments with high air temperatures and/or high humidity, work near radiant heat sources, have direct physical contact with hot objects, or perform strenuous physical activities. You need to determine if your employees are at risk, have a plan to control heat-related risks, and promote a healthful workplace. This one pager includes information about addressing heat stress at your organization.

## Heat-related illnesses are preventable and can happen to anyone



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### HAZARD HEAT ASSESSMENT

Conduct a hazard heat assessment at your workplace. Look at the work environments (both indoors and outdoors) and job tasks to determine if heat-related illness is a possibility. Talk to employees to see if heat stress occurred in the past and to find out more information about the work they perform in hot, humid work environments. Evaluate the use of personal protective equipment (PPE) and heavy clothing required to safely perform tasks, as these can increase body temperatures. Additionally, consider individual factors (e.g., age, build, underlying medical conditions) as they can also influence heat stress.

It is a good idea to contact an industrial hygienist to [assess work conditions](#) and conduct the hazard assessment.

### HEAT ILLNESS PREVENTION PLAN

Establish a [heat illness prevention plan](#). The plan outlines provisions to safely perform tasks with increased heat stress risks.

Creating a written plan helps your organization identify supervision, accountability, and employee responsibilities when it comes to heat stress. It includes your processes and expectations for hazard determination, periodic monitoring, use of controls, and the need for training. Document acclimatization procedures and what to do when an employee returns from an absence due to a heat-related illness. Ensure the written plan meets the needs of your organization.

## IMPLEMENT NECESSARY CONTROLS

Organizations should implement measures to reduce heat stress risks. Be sure to follow the OSHA hierarchy of controls when choosing controls and determine which controls work best for your organization and employees.

| Type of Control  | Examples   |
|------------------|--|
| Engineering      | <ul style="list-style-type: none"> <li>Automate processes or use power tools over manual tools to reduce workload</li> <li>Use reflective or heat-absorbing screens and barriers to protect against radiant heat</li> <li>Use personal air conditioning systems, misting devices, and fans</li> <li>Increase air flow in hot environments</li> <li>Reduce steam leaks, wet floors, and humidity</li> </ul>   |
| Administrative   | <ul style="list-style-type: none"> <li>Establish work-rest cycles and limit the duration an employee is required to work in a hot, humid environment</li> <li>Have cool water accessible and perform tasks during cooler hours of the day</li> <li>Allow sufficient time for employees to acclimate to the work environment</li> <li>Ask employees to self-monitor or use a buddy system and report signs or symptoms of heat-related illness</li> </ul> |
| PPE and Clothing | <ul style="list-style-type: none"> <li>Use personal cooling systems and breathable fabrics</li> <li>Consider how PPE and clothing influences heat stress during the selection process</li> </ul>   |

## EDUCATION AND TRAINING

Organizations must train employees on heat hazards, acclimatization procedures, signs and symptoms of heat-related illness, first aid procedures, and how to activate emergency medical services, when needed. Review the signs and symptoms of heat-related illness and incorporate this information into training to help employees understand what to look for:

| Illness         | Signs & Symptoms   |
|-----------------|--|
| Heat Stroke     | Confusion, coma, hot and/or dry skin or heavy sweating, seizure, high body temperature                 |
| Heat Syncope    | Blurred vision, fainting or near fainting  |
| Heat Exhaustion | Headache, nausea, dizziness, weakness, thirst, sweating, high body temperature, decreased urine output |
| Heat Cramps     | Painful muscle cramps, incapacitation, pain  |
| Heat Rash       | Sweating, itching skin, skin eruptions   |

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