



Fact Sheet - Heat Stress

Many workers spend some part of their working day in a hot environment, which poses special hazards to safety and health. This hazard is known as **Heat stress**, which occurs when heat is absorbed from the environment faster than the body can get rid of it.

Factors

Personal Factors	Environmental Factors	Working Conditions
<ul style="list-style-type: none"> • dehydration • lack of experience wearing PPE • being overweight or underweight • alcohol or drug use • medical conditions • medication use 	<ul style="list-style-type: none"> • high humidity • direct sunlight or other heat source • lack of air movement 	<ul style="list-style-type: none"> • prolonged shifts • infrequent rest breaks • no access to drinking water • heavy clothing 

Normal Cooling Mechanism: working in very hot areas, our bodies get rid of excess heat by sweating, increasing blood circulation and increasing the blood flow to the skin. When this works well, the body temperature drops or stabilizes at a safe level. However, if the body cannot cool off quickly, various forms of heat illness can develop.

Heat-related Illness: Look for symptoms such as: dizziness, head aches, fatigue, and a lack of thirst. The four major heat illnesses are:

Heat Rash	Heat Cramps	Heat Exhaustion	Heat Stroke
Areas of the skin itch intensely and often feel prickly due to overheating.	Painful muscle cramps, usually in legs or abdomen, which warn that heat stress is developing.	The body's response to the excessive loss of water and salt in sweat.	The body becomes unable to control its temperature. Death may occur

How can you prevent or control heat-related illnesses? Any one can suffer a heat illness, but by taking a few precautions, they can be prevented:

- Wear summer hat with a brim and loose-fitting, light-colored and lightweight clothing like cotton.
- Acclimatization - Gradually adapting to heat will reduce the severity of heat stress.
- Always drink plenty of fluids such as water and sports drinks. Plan to have at least one quart of water available per person per hour of work (two gallons for an eight-hour shift). Avoid caffeinated drinks such as coffee, soda
- Schedule vigorous work activities during the coolest parts of the work day and take frequent breaks on hot days. If possible, add more workers to reduce workload or reduce the workday.
- If you are feeling symptoms of heat illness, take a break in a shaded area. Your supervisor must provide access to shade – this may be any area where you are protected from direct sunlight, such as under an umbrella, a portable structure, or inside a ventilated building or vehicle.

Employers' Responsibility

- Ensure workers' schedule allows them to acclimatize
- Monitor environmental conditions
- Adjust work practices as necessary
- Train workers to prevent heat stress
- Provide plenty of water and shade areas
- Conduct periodic safety meetings during hot weather.

What can workers do?

- Follow instructions for controlling heat stress
- Be alert for symptoms in themselves and others
- Drink enough fluids (water or sport drinks)
- Get adequate rest and sleep

**Check the New Cal-OSHA Standard related to Heat Illness Prevention-
General Industry Safety Orders §3395 www.dir.ca.gov/title8/3395.html**