



HSSE Stop: Heat Stress
12th February 2026



Heat Stress

- Heat stress can occur when you are exposed to extreme heat and your body is unable to cool itself properly.
- The combination of high weather temperatures, and the strenuous nature of some jobs with extra personal protective clothing (PPE), increases risk to Heat stress.
- There are two effective ways the body rids itself of heat, and these are:
 1. **Sweating** - Sweat evaporating from skin cools the body
 2. **Dilation of blood vessels** – Blood is brought to the skin surface to release heat

What increases risk of Heat Stress?



Problems develop when the body's cooling mechanisms aren't able to work properly, such as when:

- Air temperature exceeds body temperature - the body cannot easily cool itself
- Air is humid - sweat doesn't evaporate quickly
- Sweat doesn't evaporate easily from a person who works hard while wrapped in heavy clothing or protective gear, e.g., masks, chemical protection suit etc.

Heat Stress- Signs and Symptoms



- Heat stress can affect individuals in different ways, and some people are more susceptible to it than others.

Typical symptoms are:

- An inability to concentrate, muscle cramps, heat rash, severe thirst - a late symptom of heat stress, fainting.
- Heat exhaustion** – which includes fatigue, unsteadiness, nausea, headache, moist skin.
- Heat stroke** – symptoms are hot dry skin, confusion, convulsions and eventual loss of consciousness. This is the most serious Heat related illness and can result in death if not detected and treated at an early stage.

Heat Stress Guidelines

Below guidelines apply to both CSE work and hot environments, i.e. working inside equipment, excavation, heavy manual handling etc.,:

- Increase fluid intake (water is best). If you are thirsty - you are already dehydrated.
- Minimize caffeine intake (coffee, Coke, Red Bull, etc.)
- Keep an eye on your co-workers for early signs of heat related illnesses.
- If you feel unwell, stop and seek medical attention.
- If you must be out in the heat, rest regularly in the shade and drink fluids frequently.
Supervisors to take the lead in managing the breaks and rotation of employees.
- Wide-brimmed hats protect workers from direct sunlight
- Use WBGT table found in **CSE HSSE Specifications Booklet 3, Section 18.15**, for work /rest ratio and additional controls; when working inside CSE.
- Consider scheduling strenuous activities for cooler parts of the day, i.e. Starting in early parts of the morning.

Discussion Points

1. Why is it important to prevent heat illness?
2. What are the responsibilities of individuals, co-workers and supervisors in preventing heat related illnesses.
3. Which are two effective ways, the body can get rids itself of heat?

5 To Remember

- 1** Preventing heat stress is always better than treating heat related illnesses.
- 2** Always have enough cool drinking water and drink water even when not thirsty.
- 3** Be your brother's keeper by looking for any heat stress related symptoms from each other and report to supervisors.
- 4** If you feel unwell, stop and seek medical attention.
- 5** Follow WBGT guidelines and apply controls stipulated on the CSE HSSE specifications