

Staying Cool on the Plant Floor – Heat Stress



Working in the heat and doing heavy physical work can affect the body's cooling system. If the body is unable to cool itself, a worker can experience **heat stress**.

What is Heat Stress?

When your body rises above the typical range of 36° to 38°C, the body will react to get rid of excess heat. If the body *continues* to gain heat faster than it can get rid of it, the person experiences *heat stress*. Health problems that result from heat stress are known as *heat disorders*.

Heat Stress Risk Factors

- Lack of acclimatization
- Poor physical fitness
- Obesity
- Increased age (40 to 65)
- Pre-existing medical conditions or treatments
- Alcohol and drugs
- Previous heat stroke
- Short term disorders and minor illnesses
- Chronic skin disorders
- Use of medication

Recognizing Heat Stress

If heat stress is not recognized and treated in the early stages, it can have serious effects on the body, such as heat cramps, heat exhaustion, or heat stroke, which can be life-threatening.

Health Disorder	Signs and Symptoms	Treatment
<p>Heat Cramps: Painful muscle cramps caused by losing too much salt through sweating</p>	<p>Muscular pain or spasms Excessive sweating</p>	<p>Move to cooler environment and sponge worker with cool water and fan. Lay the worker down and remove or loosen tight fitting clothing. If worker is fully alert and not nauseated, provide juice, sport drinks, or salt water (1 tsp salt + 500ml water).</p>
<p>Heat exhaustion: Depletion of both water and salt due to prolonged sweating and insufficient fluid replacement. More serious than heat cramps.</p>	<p>Shallow respiration Increased respiratory rate Weak rapid pulse Cool, pale, clammy skin Sweating Weakness, fatigue, dizziness Headache and nausea Fainting Muscle cramps</p>	<p>Same as heat cramps.</p>
<p>Heat stroke: The failure of the body's mechanisms to dissipate heat. Core temperature is above 41 °C. This is a medical emergency! Notify the first aid attendant, call 911 and arrange immediate transportation to medical aid.</p>	<p>Hot, dry, flushed skin Absence of sweating Agitation and confusion Decreased level consciousness Headache Nausea and vomiting Seizures Shock Cardiac arrest</p>	<p>Maintain airway, breathing, circulation. Move to coolest place available. Lay the worker down unless he/she is vomiting or seizing. If so, lay them in a lateral (side) position. Remove all outer clothing, spray or sponge entire body with cold water, fan. If worker is fully alert and not nauseated, provide juice, sport drinks, or salt water (1 tsp salt + 500ml water). Transport worker to medical aid.</p>

Resource: <http://www.worksafebc.com/>