



# RECOGNISING AND TREATING HEAT-RELATED ILLNESS AT WORK

Workers who are exposed to extreme heat or work in hot environments (both indoor and outdoor) may be at risk of heat-related illness (formerly known as heat stress), which can be fatal.

Heat-related illness is a term used to describe a range of increasingly harmful medical conditions that can happen when the body is unable to cool itself down enough to maintain a healthy temperature:

Stages of heat-related illness	Symptoms	WHAT TO DO
<p>1. <b>Dehydration</b> comes first. It causes the heart to work faster and leads to reduced fluid being available to sweat. Being dehydrated by just 2% impairs a person's performance in tasks that require attention, coordination and immediate memory skills. Dehydration can also cause painful <b>heat cramps</b> in muscles from the loss of salt and water (usually affects people who sweat a lot during strenuous activity).</p>	<p>People can experience:</p> <ul style="list-style-type: none"> <li>• mild to severe thirst</li> <li>• dry lips and tongue</li> <li>• decreased amount of urine passed that appears darker than normal</li> <li>• increased breathing and heart rate</li> <li>• weakness or light-headedness (particularly when standing)</li> </ul>	<p><b>Immediate first aid</b></p> <ul style="list-style-type: none"> <li>• Move the person to a cool place with circulating air, such as a site shed (air-conditioned where possible) or in a shaded area</li> <li>• Loosen all tight clothing and remove unnecessary garments, including PPE (mask, apron, overalls, etc).</li> <li>• Give the person cool (not cold) fluids to drink – preferably water.</li> <li>• Obtain medical advice if symptoms don't improve.</li> </ul>
<p>2. If dehydration is not treated, it can lead to <b>heat exhaustion</b>, which is the body's response to the excessive loss of water and salt from sweating.</p>	<p>People can experience:</p> <ul style="list-style-type: none"> <li>• feeling hot, exhausted, weak and fatigued</li> <li>• persistent headache</li> <li>• intense thirst as well as nausea and vomiting</li> <li>• feeling dizzy and faint</li> <li>• being clumsy with slower reaction times</li> <li>• poor judgement</li> <li>• rapid breathing and shortness of breath</li> <li>• rapid weak pulse, palpitations</li> <li>• tingling, numbness of fingers and/or toes</li> <li>• visual disturbance.</li> </ul>	<p><b>Immediate first aid and medical treatment</b></p> <ul style="list-style-type: none"> <li>• Follow DRSABCD emergency protocol (<b>D</b>anger, <b>R</b>esponse, <b>S</b>end for help, <b>A</b>irway, <b>B</b>reathing, <b>C</b>PR and <b>D</b>efibrillation). Call for an Ambulance - triple zero (000).</li> <li>• Move the patient to lie down in a cool place with circulating air, such as a site shed (air-conditioned where possible) or a shaded area</li> <li>• Loosen all tight clothing and remove unnecessary garments, including PPE (mask, apron, overalls, etc).</li> <li>• Apply cold packs or wrapped ice to neck, groin and armpits.</li> </ul>

*continued over...*

Stages of heat-related illness	Symptoms	WHAT TO DO
<p>3. If heat exhaustion is not treated, it can lead to <b>heat hyperpyrexia</b> (a medical term meaning ‘an extremely high rise of core body temperature that is equal to or higher than 40.5 °C’).</p>	<p>People can experience:</p> <ul style="list-style-type: none"> <li>• moist skin</li> <li>• mental dysfunction, such as poor judgement, slower reaction times, irritability, clumsiness, etc.</li> </ul>	<p><b>Immediate first aid and medical treatment (continued)</b></p> <ul style="list-style-type: none"> <li>• Cover the person with a wet sheet (or similar) until the ambulance arrives. If a wet sheet isn’t practicable, sponge the person down with cool (not cold) water and fan them with gentle air movement until the ambulance arrives.</li> <li>• <b>Important:</b> Be careful the patient doesn’t start to shiver – it’s an automatic muscular reaction which will make the core body temperature rise even further. If shivering happens, remove the wet sheet / stop sponging immediately and cover the patient until they stop shivering. Once they have stopped, commence sponging the patient again with cool (not cold) water.</li> <li>• Ensure an ambulance has been called – triple zero (000) so the patient can be assessed at the scene and, if considered necessary, transferred to hospital to receive medical attention.</li> <li>• If conscious and able to swallow, give the patient cool (not cold) fluids to drink – preferably water.</li> <li>• Ring the ambulance again to advise if the person has a seizure or becomes unconscious.</li> </ul>
<p>4. If heat exhaustion is not treated, it can result in <b>heat stroke</b>, which is a <b>life-threatening medical emergency and potentially fatal</b>.</p> <p>Heat stroke occurs when the core body temperature rises above 40.5°C.</p>	<p><b>Victims stop sweating and develop flushed, dry, hot skin.</b></p> <p>Other symptoms include:</p> <ul style="list-style-type: none"> <li>• oral or armpit temperature readings of possibly over 41°C</li> <li>• pounding rapid pulse</li> <li>• headache, nausea and/or vomiting</li> <li>• dizziness and visual disturbances</li> <li>• being clumsy with slower reaction times</li> <li>• poor judgement</li> <li>• irritability and mental confusion which may lead to collapse, fitting and unconsciousness.</li> </ul>	

Heat-related illness can also cause:

- worsening of existing medical conditions
- unprecedented or unanticipated health problems that haven’t previously existed
- **Heat rash (prickly heat)** – an itchy rash of small raised red spots on the face, neck, back, chest and thighs caused by hot and moist environments.

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 SafeWork NSW, 92–100 Donnison Street,  
 Gosford, NSW 2250  
 Locked Bag 2906, Lisarow, NSW 2252  
 Customer Service Centre 13 10 50  
 Website [www.safework.nsw.gov.au](http://www.safework.nsw.gov.au)  
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