Preventing heat stress in hot or humid conditions

What is heat stress?

Heat stress is when the body can’t cool down enough. It is not just high temperatures that are dangerous. As humidity increases the temperature feel hotter, making heat stress more likely.

If the temperature is 30 degrees but it’s 85 per cent humidity, it feels like the temperature is 39 degrees, which is in the danger zone. At 33 degrees with 85 per cent humidity, heat stroke is very likely to occur because the body experiences the temperature as 52 degrees.

Always consider both heat and humidity levels when planning outdoor activities.

Heat stress is caused by a combination of:

- Physical activity
- Heat and humidity
- Restrictive clothing not allowing air to circulate
- Lack of sun-protective clothing outdoors (exposing the skin to the hot sun worsens heat stress as well as risking burns and skin cancer)

Who is at risk?

Anyone can be vulnerable but you can be more at risk if you:

- are young or elderly
- are female – women have reduced ability to dissipate heat
- have diabetes or heart disease
- have mental health issues
- have a poor or restricted diet
- consume excess alcohol or caffeine
- are overweight
- are in poor health
- have poor physical fitness

What can heat stress cause?

Heat rash: skin irritation due to unevaporated sweat causing itchiness and redness.

Treat by keeping skin cool, clean and dry.
Heat cramps: painful muscle spasms caused by excessive sweating which depletes salts.

Rest in a cool place and drink small amounts of an electrolyte fluid or sports drink.

Heat faint: a drop in blood pressure causing faintness as the body attempts to cool down following overheating.

Rest in a cool place and drink small amounts of an electrolyte fluid or sports drink. Lie down and elevate legs.

Heat exhaustion and heat stroke: These serious conditions require IMMEDIATE treatment as the body is unable to cool itself.

Warning signs include:

- muscle cramps in limbs or stomach
- urine becoming dark or in minimal amounts
- nausea and vomiting
- headaches
- dizziness and fainting

Remove the person from the heat and GET URGENT MEDICAL ATTENTION. Meanwhile rapidly cool the person by spraying with water and fanning down or using ice packs or iced water bath.

Preventing heat stress

Under certain conditions anyone can suffer from heat stress but your chances are less if you:

- are physically fit
- are not ill – you must seek medical advice before participating in any activity in a hot or humid environment if you have the flu, gastro, vomiting or a viral illness
- are sensible about alcohol and always drink plenty of water before going to bed or beginning any physical activity
- are wearing appropriate sun-protecting clothes, sunglasses and hat if outdoors
- are acclimatised to the environment. It may take up to a week or more, with reduced workload, to acclimatis to a hotter or more humid environment.
- drink enough water to keep your urine a pale colour – if you have not regularly passed urine you have not drunk enough water. Drink regular, frequent amounts of water during activities in heat-stressing conditions as well as prior to and after activities.
- drink electrolyte-containing sports drinks if you work or exercise at high intensity in high temperatures; otherwise a normal diet plus water is adequate

Check [www.bom.gov.au](http://www.bom.gov.au) for weather reports if you are concerned about outdoor plans.