

# SAFETY TIPS WHEN WORKING IN THE HEAT



Working in the harsh Australian heat increases the risk of dehydration and heat stress for athletes and officials. We are at risk by working outdoors performing physically intensive labour and indoor officials who are exposed to high temperatures with poor ventilation. When working in the heat, follow these 14 tips to minimise your risk of heat illness and stay healthy and safe on hot summer days.

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## A. POSITIVE ACTIONS YOU CAN TAKE

### 1. Don't wait until you are thirsty

Don't wait until you are thirsty to drink. If you are thirsty you are already dehydrated. Instead drink small amounts frequently at regular intervals. 250mls every 15-20 mins is the recommendation for working in the heat.

### 2. Pre-hydrate

Drink plenty of fluids in the hours before your shift so that you are not starting your roster with a fluid deficit.

### 3. Drink an electrolyte drink

Heavy sweat rates when working in the heat can cause substantial electrolyte losses. An electrolyte drink will replenish lost electrolytes quickly and keep you performing at your peak. Choose a carbohydrate-electrolyte drink (low GI) for sustained energy release, or sugar free electrolyte drink for carb-free electrolyte replenishment.



### 4. Carry a Drink Bottle

You are more inclined to drink when fluid is readily available. Aim to refill an 800ml drink bottle at least once every hour.



## 5. Take Adequate Meal Breaks

Food contains water and is one of the primary means by which we replace lost fluids daily. Eating food also helps to stimulate the thirst response, causing you to drink more. Ensure your diet includes lots of leafy greens, fresh fruit and nuts to help replenish the electrolytes lost through sweat.



## 6. Accessorise!

Wearing a full brim hat is a good way to keep the sun off your face and neck and a definite must for working in the Aussie sun.



Some other useful products are available that can be worn around your neck and keep you cool throughout the competition.



## 7. Slip, Slop, Slap

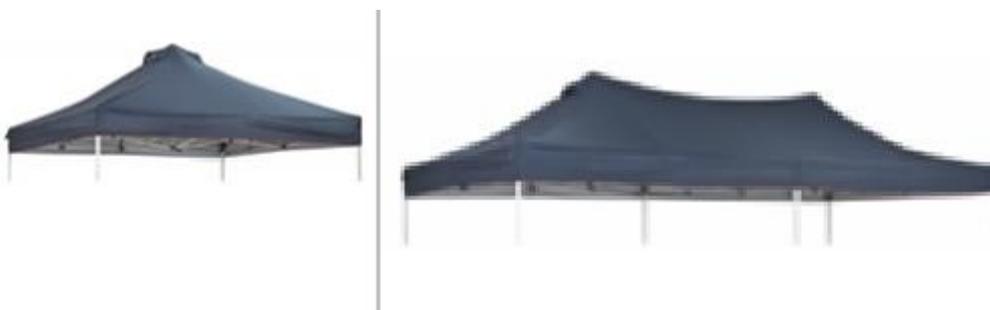
When you're sweating for long hours out in the melting sun, you need to ensure your sunscreen is water resistant, long lasting and covers you with the highest possible levels of UV protection-A SPF 50+ sunscreen provides high level of protection for officials who are out in the sun.

## 8. Dress Appropriately

Choose light weight work wear preferably made from organic materials such as cotton. Organic fibres breathe better and promote airflow whereas synthetic fibres trap heat, increasing the likelihood of heat stress.



## 9. Provide Shade at all competition sites



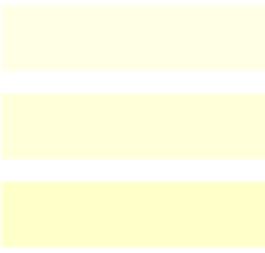
All event sites must have adequate shade for both the athletes and the officials.

All track start points must have shade as the start team move from point to point – and often by the nature of the program – the start team don't get to have the benefit of the room to rest.

Field events should be provided with shade and this must continue.

## B. MONITOR YOURSELF AND OTHERS

### 10. Monitor Your Urine

		If your urine matches these colours you are hydrated
		If your urine matches these colours you are de-hydrated and you should drink more!
		If your urine matches these colours you are seriously de-hydrated or you could have blood in your urine. You should contact a doctor!

## 11. Watch your fellow official for:

**Heat cramps** are muscular pains and spasms that usually occur in the legs or abdomen. Heat cramps are often an early sign that the body is having trouble with the heat. Move the person to a cooler place when suffering cramps; once a comfortable position has been assumed, it is best to lightly stretch the affected muscle and gently massage the area. It is best to drink an electrolyte-containing fluid, such as a commercial sports drink, fruit juice, or milk, and if such beverages are not available, water. A person suffering heat cramps should not take salt tablets.

**Heat exhaustion** is a more severe condition than heat cramps. Heat exhaustion most often affects athletes and officials, but it may also impact anyone wearing heavy clothing in a hot, humid environment.

**Signs of heat exhaustion** include cool, moist, pale, ashen, or flushed skin, headache, nausea, dizziness, weakness, and exhaustion. If someone is suffering heat exhaustion, move them to a cooler environment with circulating air. Help them remove or loosen as much clothing as possible and apply cool, wet clothes or towels to the skin. Fanning or spraying the person with water also can help. If the person is conscious, give small amounts of a cool fluid, such as a commercial sports drink or fruit juice, to restore fluids and electrolytes. Milk or water may also be given. Give about ~~4 ounces~~ 400 ml's of fluid every 15 minutes. If the person's condition does not improve or if he or she refuses water, has a change in consciousness, or vomits, call medical for assistance.

Finally, **heat stroke** is a life-threatening condition that develops when the systems of the body are overwhelmed by heat and begin to stop functioning. Signs of heat stroke include extremely high body temperature, red skin that may be dry or moist, changes in consciousness, rapid and weak pulse, vomiting, and seizures.

The Australian Red Cross treatment plan for heat stroke: -

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|---|
| ● Call 000 for an ambulance immediately (or 112 from a mobile).                           |
| ● Cool the person using wet towels or a wet sheet with a fan directed across the surface. |
| ● If ice packs are available, wrap them in towels and place them in the armpits or groin. |
| ● If shivering occurs stop active cooling.  |
| ● Check vital signs at regular intervals.   |
| ● If unconscious or not fully conscious, place in the recovery position.                  |
| ● Prepare to give CPR if necessary.   |

## C. ACTIONS TO AVOID

### 12. Avoid Ice Cold Drinks

Cold water causes the blood vessels in the stomach to constrict, reducing the rate of fluid absorption. Cool water is absorbed faster, which is important to keep you hydrated when working in the heat.



### 13. Limit Caffeine Intake

Avoid consuming caffeine before and during your time as an official in the sun (this includes coffee, tea, cola, energy drinks). Caffeine has a diuretic effect which increases water loss and contributes to dehydration.



## 14. Avoid alcohol before your day in the sun

Alcohol is a diuretic and over consumption can cause severe dehydration. If you consume alcohol 24-36 hours before you commence your work as an official you may not recover and your dehydration levels will only worsen throughout the day.



## D. HYDRATION, KEY TO PREVENTING HEAT-RELATED ILLNESS

As summer ends, we officials should remain aware of heat-related hazards for officials, especially outdoor officials. We also need to know and share how to prevent illness or injury.

Heat-related illness occurs because of the body's inability to self-regulate its temperature.

The body's best tool to keep itself from getting too hot is sweat. As sweat evaporates from the skin, it cools, drawing heat from the body and dissipating it. The body must be hydrated to produce sweat. Therefore, a dehydrated official faces more risk from heat.

However, especially in hot summer months, it may be difficult for some officials to drink enough water while completing their duties to sweat enough. If an official is unable to replace the water he or she loses to evaporation, the official may become dehydrated, and sweating may become impossible. This will increase the body temperature. As body temperature reaches higher, heat-related illnesses such as heat stroke or heat exhaustion become increasingly likely.

If an official takes in less water than he or she loses to sweat, breathing, urination and defecation, the official's body will become dehydrated. Generally, the body does a good job of keeping fluid levels about right by signaling thirst as needed. However, completing the tasks associated with being an official often puts demands on the body that make adequate hydration difficult.

Many people go about their lives in a state of slight dehydration. There is no cheap and convenient way for us to measure Officials hydration, but Official's themselves can be aware of a few factors other than thirst that point to the need for more water: Taking in fluids only when thirsty is rarely sufficient. Further, when the body doesn't receive enough water, urine becomes more dense and darker in colour. Frequent headaches, dry skin and fatigue also point to low body fluid levels, especially when accompanied by thirst, or experienced after strenuous work and exercise also may indicate dehydration.

While the body can have too much water when electrolyte levels get unbalanced or in the presence of certain medical conditions, most people should be drinking more water.

One of the most effective means to ensure appropriate water intake is eating and drinking during meal breaks. Most fluid ingestion occurs with meals, which is also when the body takes in most of the electrolytes it needs. Skipping a meal not only deprives the officials' body of the calories it needs, it also deprives the body of fluids to keep itself cool.

Of course, meals alone will not provide enough water. Safety and health organizations recommend officials who face a risk of heat-related illness to drink small amounts of cool, non-alcoholic, liquids frequently — one cup every 20 minutes. However, it is important to recognize that broad guidelines do not necessarily reflect the needs of all Officials for all tasks jobs in all environments.

In addition to easy access to clean water, you should have rest breaks and bathroom breaks to accommodate fluid intake (and subsequent removal), and Officials should not hesitate to take short water breaks throughout the day to maintain hydration.

Dehydration is the first step to more severe heat related illness. Strenuous labour in hot and/or exceptionally humid environments increases the body's temperature and its demand for fluids. We should all work and plan together to guarantee the body has the fluids it needs to function effectively and stay healthy until the job is done.

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### **The Three B's of Official's Hydration:**

1. **Beverages:** Officials should have sufficient non-alcoholic fluids, ideally water, and clean cups.
2. **Breaks:** Officials should take the time needed to drink enough fluids through the day.
3. **Bathrooms:** Officials should access to bathroom facilities.