



This policy provides evidence-based guidance for protecting the health of those participating in football and futsal activities, competitions and events from the potentially ill effects of extreme heat, while ensuring that play is not unnecessarily interrupted.

## Purpose

The Football NSW Extreme Heat Policy (**Policy**) aims to assist Competition and Tournament Managers and others responsible for the wellbeing of participants in football and futsal during hot weather, including those individuals that need to manage heat related risk during planned training and club activities.

The Policy is based on the Sports Medicine Australia Extreme Heat Policy 2021 (**SMA Extreme Heat Policy**) – available [here](#) - and will be updated as new research findings or technology emerges to assist in managing heat related sport risks.

## Application

The Policy applies to all Football NSW (**FNSW**) affiliated Clubs, Associations (and their affiliated Clubs), Branches, Centres, Referee Associations and all Officials, Coaches, Managers, Technical Directors, Match Officials, volunteers and participants.

FNSW requires that the Policy be applied to all FNSW State and affiliated football and futsal competitions, tournaments, training, trials, trial matches and all sanctioned football and futsal activities.

## Definitions

- **Extreme heat** – is when the ambient temperature combined with relative humidity can cause people to become ill from heat stress or heatstroke, which can be fatal.
- **Heat related illness** - is characterized by nausea, dizziness, vomiting and fainting.
- **Heat stress** – the risk of heat stress is increased in hot and humid weather resulting in our body being unable to provide enough sweat for adequate cooling.
- **Heat stroke** – is a life-threatening condition in which the body overheats and the body's internal systems start to fail as it can no longer maintain a healthy temperature.
- **Bureau of Meteorology (BOM)** - is the Australian Government Agency responsible for providing weather services to Australia and surrounding areas.
- **Sports Medicine Australia (SMA)** – is recognised as the leading sports medicine organisation in Australia.

## Background

The temperature and humidity levels experienced in NSW can be varied and extreme in their intensity, particularly during the summer months and at certain times during spring and autumn.

With these periods of hot weather regularly occurring in metropolitan and regional areas of NSW, accompanied by high levels of humidity, the risk of heat related illness has increased.

Playing sport in these conditions can prove harmful if correct measures of prevention and management are not adopted.

Since 2017, the Football NSW Hot Weather Policy has been relied upon to manage heat related risks in football and futsal. The Football NSW Extreme Heat Policy replaces the Football NSW Hot Weather Policy for the purpose of managing extreme heat related health risks in football and futsal across the FNSW footprint.

## Sport Risk Classifications

The SMA Extreme Heat Policy provides recommendations for a range of sports based on participation rates and splits included sports into five “Sport Risk Classification” groups based on the combined effects of exercise intensity and the clothing and equipment worn by participants.

The SMA Extreme Heat Policy places football in Sport Risk Classification 3.

While the SMA Extreme Heat Policy does specifically reference synthetic fields, we recommend that for events on synthetic fields, reference be made to Sport Risk Classification 5.

In following the SMA Extreme Heat Policy and referencing the Air Temperature v Relative Humidity Charts for the relevant Sport Risk Classification, when a threshold is reached, a colour coding system recommends the actions that can be taken to reduce heat-stress risk.

The colour coded risk levels contained in the SMA Extreme Heat policy and referred to in this Policy are:

Green – Low Risk

Yellow – Moderate Risk

Orange – High Risk

Red – Extreme Risk

## Using the Extreme Heat Policy

To predict the heat risk associated with an event, the air temperature and relative humidity for the location where the event will be taking place will need to be obtained and monitored when an air temperature above 32° or at least 30% relative humidity is forecast.

It is essential that the **peak temperature** during the time of play or activity is used in conjunction with the accompanying **relative humidity** at that specific time.

Note that if the peak relative humidity is used for a particular day, which usually occurs when temperature is lowest, heat stress risk will be over-estimated and the event unnecessarily disrupted or cancelled.

On the nominated day, if the forecast is for air temperatures above 32° or at least 30% relative humidity, event organisers should continue to monitor and check the temperature and relative humidity every hour.

## To obtain a forecast of temperature and humidity

To obtain the current or predicted forecast of temperature and humidity for the upcoming 72 hours:

1. Visit <http://www.bom.gov.au/places/> and in the "Change location" box enter your suburb, town or postcode.
2. Click on: **"DETAILED 3-HOURLY FORECAST"** option located on the right side of the page.
3. Select the specific day/date of the event.
4. Identify the column with the nearest time to the planned football or futsal event.
5. Note the "Air Temperature (°C)" value AND IN THE SAME COLUMN, note the concurrent "Relative Humidity (%)" value found towards the bottom of the page for that date.

## Using the Sport Risk Classification Charts

Following is the football Sport Risk Classification 3 Chart (applicable to football played on grass fields and futsal played indoors) and the Sport Risk Classification 5 Chart (applicable to football played on synthetic fields).

Once the Air Temperature and Relative Humidity at the event location has been obtained, the combined Air Temperature (x-axis) and Relative Humidity (y-axis) should be plotted on the relevant chart.

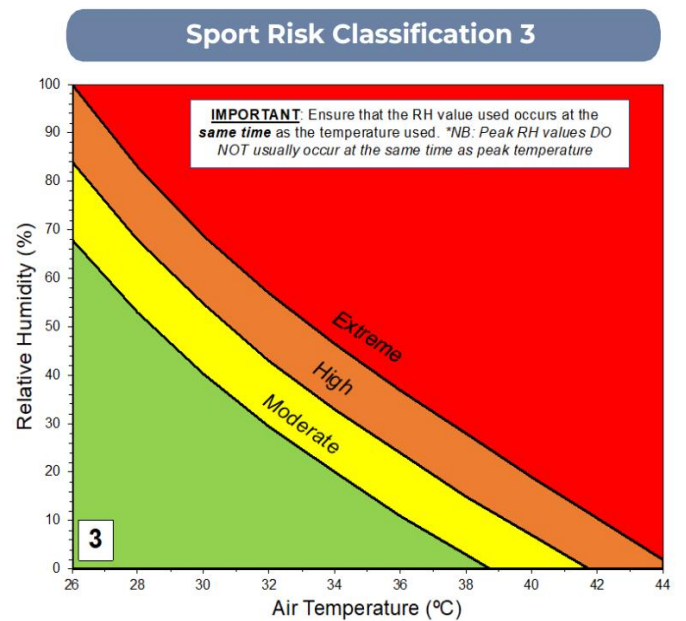
The point of intersection of these two values will subsequently fall within one of the 4 coloured zones indicating a given level of heat stress risk.

Colour	Risk Level
Green	Low Risk
Yellow	Moderate Risk
Orange	High Risk
Red	Extreme Risk

By way of example, if the Air Temperature is 34° and the Relative Humidity is 50%, the Risk Level will be High (i.e. Orange).

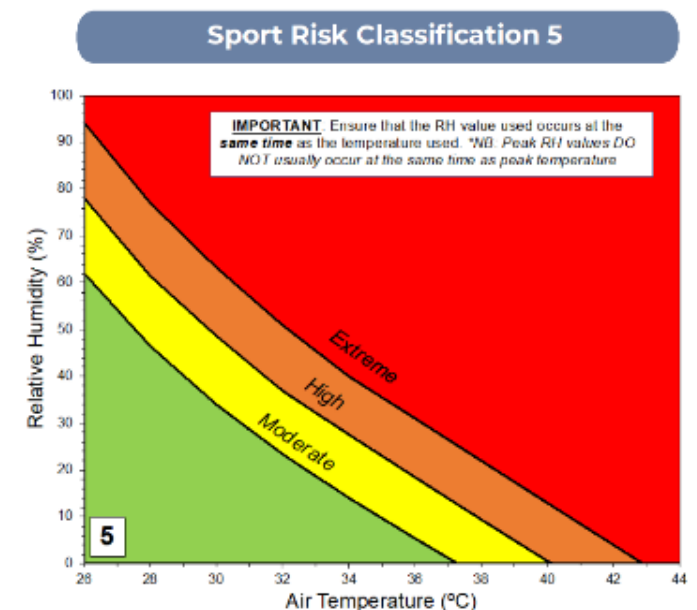
## Football played on GRASS FIELDS or INDOORS

Refer to Sport Risk Classification 3 Chart.



## Football played on SYNTHETIC FIELDS

Refer to Sport Risk Classification 5 Chart



## Mitigating Heat Stress Risk

For each Risk Level, the SMA Extreme Heat Policy recommends the actions to be taken to mitigate the prevailing heat stress risk.

**Note:** these actions are cumulative, i.e. where the Risk Level is High, the recommended actions for Low Risk, Moderate Risk **and** High Risk should be taken by the event organiser.

### GREEN – Low risk

**Hydrate** – Drink regularly before, during and after the match or activity.

**Modify clothing** – wear lightweight clothing and remove excess layers.

### YELLOW – Moderate risk

**Rest breaks** – Increase the frequency and/or duration of scheduled rest/drink breaks and implement additional rest breaks.

Rest breaks should be taken in the shade.

### ORANGE – High risk

**Active cooling** – in addition to increased rest/drink breaks in the shade, cool down using active cooling strategies, e.g. place an ice pack or damp towel filled with crushed ice around the neck during breaks.

### RED – Extreme risk

**Stop** the match, event or activity – seek shade and active cooling strategies should be applied.

(The match, event or activity is ceased, and is either cancelled or postponed to a cooler time. Refer to the relevant competition regulations for match re-scheduling.)

## Further heat stress risk mitigation strategies

More detailed heat stress risk mitigation strategies can be viewed in the [SMA Extreme Heat Policy](#)

## If the Relative Humidity is Unavailable

If the Relative Humidity for the event location is unavailable via the <http://www.bom.gov.au/places/> website or other means, matches and football or futsal activities should be cancelled or postponed:

- For Youth (Under 18 years), at a maximum ambient temperature of 32° or above.
- For Adults, at a maximum ambient temperature of 37° or above.

## Other Weather Conditions

Other conditions that should also be considered include extreme wind, thunder, lightning, rain and air quality.

[FNSW Lightning policy](#)

[Other FNSW Weather Policies & Documents](#)

## Who is Especially at Risk of Heat-related Illness

While even the fittest athlete can fall victim to heat-related illness, certain people are especially vulnerable:

- Aged over 65 years, especially if unfit. Note that age effects on thermoregulation may become progressively worse with age, so risk is generally greater with more advanced age.
- Heart or kidney disorders / disease presents a greater risk of cardiovascular or renal failure during or following exercise in the heat.
- Recently sick with a fever.
- Taking prescription medications that impair sweating
- A reduced ability to behaviourally respond to heat, e.g. due to mental health challenges or substance abuse.
- Very high body fat.
- Recently (in the past week) arrived from a cold climate

### Special Note:

It is currently unclear if heat stress risk is truly elevated in children. Similarly, some reports indicate that pregnant women exposed to extreme heat may be at elevated risk negative birth outcomes, but no evidence links this with exercise, which is known to provide extensive benefits to mother and baby. Thermoregulatory capacity during pregnancy is also not compromised.

## Heat-related Illness – Symptoms, Signs and Management

Whenever exercise or sport is being carried out in the heat, irrespective of the heat stress risk level, recognising the signs and symptoms of heat-related illness is essential for ensuring the safety and wellbeing of all participants.

Heat-related illnesses represents a spectrum of disorders, ranging from mild symptoms to a life-threatening illness.

The health impacts of heat-related illness can be a direct result of an increase in core temperature or the result of the strain on the heart associated with defending the rise in body temperature. The symptoms and signs of heat related illness and the immediate management procedures are summarised in the Table opposite.

### For further information

For more information about Heat Related Illness, symptoms and first aid management go to:

[NSW Health Heat Related Illness Factsheet](#)

In case of an emergency seek immediate medical assistance or dial Triple Zero (000)

	Heat Exhaustion / Syncope	Exertional Heat Stroke (EHS)
<b>Symptoms (what the person might feel)</b>	<ul style="list-style-type: none"> <li>- Headache</li> <li>- Dizziness</li> <li>- Weakness</li> <li>- Nausea</li> <li>- Vomiting</li> </ul>	<ul style="list-style-type: none"> <li>- Brain symptoms including:               <ul style="list-style-type: none"> <li>o Confusion</li> <li>o Agitation</li> </ul> </li> <li>- Symptoms can develop rapidly</li> <li>- EHS is a medical emergency</li> </ul>
<b>Signs (what you might see)</b>	<ul style="list-style-type: none"> <li>- Fainting</li> <li>- ↑Heart rate</li> <li>- ↓Blood pressure</li> <li>- Core temperature usually &lt; 40°C</li> <li>- Absence of brain symptoms</li> </ul>	<ul style="list-style-type: none"> <li>- Brain symptoms including:               <ul style="list-style-type: none"> <li>o Confusion</li> <li>o Unsteadiness</li> <li>o Aggressive or irrational behaviour</li> <li>o Altered level of consciousness, seizures, coma</li> </ul> </li> <li>- ↑Heart rate, ↑breathing rate, ↓blood pressure</li> <li>- Core temperature usually &gt; 40° C</li> </ul>
<b>Immediate management</b>	<ul style="list-style-type: none"> <li>- Move to shade and cool</li> <li>- Remove as much clothing as possible</li> <li>- Remove protective equipment (e.g. helmet, pads)</li> <li>- Apply lots of water to skin</li> <li>- Oral Fluids</li> <li>- Lie on back with legs elevated</li> <li>- Watch for worsening</li> </ul>	<ul style="list-style-type: none"> <li>- ABC (airways, breathing, circulation)</li> <li>- Aggressively cool the body with ice and water</li> <li>- Call ambulance</li> <li>- Continue cooling while transfer to hospital</li> <li>* Cool first, transport second *</li> </ul>

### Further Information

Visit [www.footballnsw.com.au](http://www.footballnsw.com.au)

Phone: 02 8814 4400

Email: [info@footballnsw.com.au](mailto:info@footballnsw.com.au)

### Acknowledgements

[Sports Medicine Australia – Extreme Heat Policy](#)

[Bureau of Meteorology](#)

[NSW Health](#)

[Smart Play Beat the Heat](#)

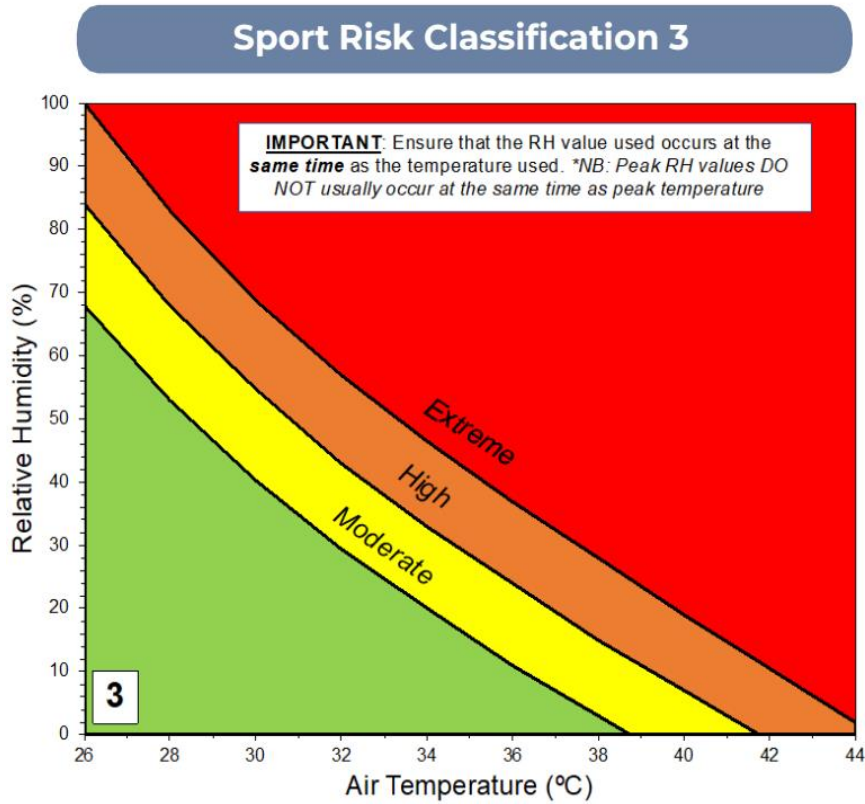
[Smart Play UV Exposure and Heat Illness Guide](#)

### Disclaimer

The information contained in this policy is general in nature and does not constitute medical advice. While all reasonable attempts have been made to ensure the information is accurate, Football NSW cannot accept responsibility for any loss, injury, claim or damage that may result from using or applying the information in this policy.

**Football played on GRASS FIELDS or INDOORS**

Refer to Sport Risk Classification 3 Chart.



**Football played on SYNTHETIC FIELDS**

Refer to Sport Risk Classification 5 Chart

