



**BASEBALL**  
SOUTH AUSTRALIA

South Australian Baseball League Inc.

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**HOT WEATHER POLICY**

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## **POLICY STATEMENT:**

The Hot Weather Policy refers to the management of extreme hot weather situations for junior and senior/adult players. These situations will include, but are not limited to, training, games, selection trials and Baseball SA events. The policy will outline the process to be enacted when conditions are such that training, trials or games should be modified or should not be conducted to protect players from potential heat associated conditions.

## **MANAGEMENT OF PLAYERS, OFFICIALS & VOLUNTEERS DURING EXTREME HEAT:**

During periods of extreme hot weather it is important to ensure that all players, officials and volunteers take measures to promote sun safety. A copy of the Sports Medicine Australia 'Beat the Heat' Fact Sheet is contained at Appendix B and can be found by clicking on the link provided below. Baseball SA encourage Clubs to provide this Fact Sheet (or the link) at the commencement of the season to players, parents and team officials.

### [Beat the Heat Fact Sheet](#)

Baseball SA promote and encourage players, officials and volunteers to regularly apply sun screen and to ingest oral fluids before, during and after training, trials and games. Scheduled regular breaks can be factored into training, trials and games to enable players and officials to rest in the shade. Clubs must provide adequate sunshades at their grounds.

## **JUNIOR PLAYERS & JUNIOR UMPIRES:**

A junior player is a person with a League Age of 16 or below. Children are particularly susceptible to extremes of heat and should not be forced to play or continue to play, train or trial in these conditions. If a junior complains about feeling unwell or is distressed during training, trials or play, they are to be supported to cease participation.

When the Heat Policy is enforced, a junior player playing Senior Division 1 or lower or Women's League MUST have a signed consent form from a parent or guardian submitted to their Club and forwarded to the officiating umpire on the day of play. If the consent form is not provided, the junior player must not participate.

Consent form submission should be noted by the scorer on the Official Results Sheet in the 'Comments' section.

The Junior Player Hot Weather Policy Consent Form can be found at Appendix A.

When the Hot Weather Policy is enforced, an umpire 17 years and younger may NOT officiate in any game, both Senior or Junior.

## **SYMPTOMS & MANAGEMENT OF HEAT STRESS & ILLNESS:**

Heat stress and illness may occur as a result of heat exhaustion or stroke. Heat exhaustion is generally more common and may occur following exercise where there is a drop in blood pressure (postural hypotension). Some individuals may be suffering heat stroke where they could collapse during exercise and there may be altered consciousness and confusion.

Physical symptoms may include: light headedness, dizziness, nausea, obvious fatigue, cessation of sweating, obvious loss of skill and coordination, confusion, aggressive or irrational behaviour, altered consciousness, collapse, ashen grey pale skin.

In the event that a player, official or volunteer has any of the physical signs or symptoms identified above it is recommended that the person is removed immediately from the field to a cool place, raising their legs for improved circulation and blood pressure and removing any excess clothing (for example, remove a catcher's protective equipment). Apply a cool wet towel to the back of the neck and encourage intake of fluids. If vomiting, confusion or altered consciousness is apparent, then an ambulance is encouraged to be called.

## **REFERENCES:**

All **forecast** and **actual** temperatures in relation to the Baseball SA Hot Weather Policy are to be found on the website of the Australian Bureau of Meteorology at [www.bom.gov.au](http://www.bom.gov.au) .

**Forecast** temperatures are found at [www.bom.gov.au](http://www.bom.gov.au) > SA > Adelaide Forecast

Direct link : [BOM Adelaide Forecast](#)

**Actual** temperature is found at [www.bom.gov.au](http://www.bom.gov.au) > Adelaide Observations > Adelaide (West Terrace / ngayirdapira) > Temp °C column

Direct Link: [BOM Adelaide Observations](#)

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**HEAT POLICY FOR DAY EVENTS WITH A FORECAST TEMPERATURE OF 37° 38° 39°:**

This includes any training, trials, games or events scheduled during the *day* (meaning an event that is scheduled to start earlier than 6:00PM).

If the **forecast** temperature at 6:00PM the **evening prior** to the event is 37, 38 or 39 degrees, as per the [BOM Adelaide Forecast](#), then the following will apply:

Event	Grade/Division	Length of Game	Run Limit	Mercy
Game	Division 1 (single game)	7 innings or 120 minutes (no new innings to start after 120 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 1 (double header)	BOTH games: 7 innings or 120 minutes (no new innings to start after 120 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 2	7 innings or 90 minutes (no new innings to start after 90 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 3	7 innings or 90 minutes (no new innings to start after 90 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 4	7 innings or 90 minutes (no new innings to start after 90 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 5	5 innings or 90 minutes (no new innings to start after 90 min)	5 run limit	6 runs in front during, or at the completion of, the 4 <sup>th</sup> innings
Game	Division 6	5 innings or 90 minutes (no new innings to start after 90 min)	5 run limit	6 runs in front during, or at the completion of, the 4 <sup>th</sup> innings
Game	Division 7	5 innings or 90 minutes (no new innings to start after 90 min)	5 run limit	6 runs in front during, or at the completion of, the 4 <sup>th</sup> innings
Game	U11	Cancelled. Baseball SA will not reschedule game.		
Game	U13	Cancelled. Baseball SA will not reschedule game.		
Game	U15	Cancelled. Baseball SA will not reschedule game.		
Game	U17	Cancelled. Baseball SA will not reschedule game.		
Game	U9	Cancelled. Baseball SA will not reschedule game.		
Game	Don Rice	Cancelled. Baseball SA will not reschedule game.		
Game	Women's	Cancelled. Baseball SA will not reschedule game.		
Game	Masters	Cancelled. Baseball SA will not reschedule game.		
Carnival	Tball	Cancelled. Baseball SA may reschedule Carnival.		
Training	Juniors	Can be rescheduled between 8:00AM and 11:00AM.		
Training	Seniors	Can be rescheduled to early morning (before 11:00AM).		
Trials	Charter/State	Can be rescheduled between 8:00AM and 11:00AM.		

**COMMUNICATION:** Baseball SA will announce that the Hot Weather Policy is in effect soon after 6:00PM on the Baseball SA Website (via a scrolling banner on the home page) and Baseball SA Facebook Page which we encourage all Clubs to share.

**NEW INNINGS:** No new innings to start after the time limit listed above, with the time being the moment the third out of the previous innings occurs.

**TIED GAMES:** If, after the designated number of innings, teams are tied and the allotted time has not been reached at the time of the 3<sup>rd</sup> out, the game may continue to a result until time is reached.

**HEAT POLICY FOR DAY EVENTS WITH A FORECAST TEMPERATURE OF 40° OR ABOVE:**

This includes any training, trials, games or events scheduled during the *day* (meaning an event that is scheduled to start earlier than 6:00PM).

If the **forecast** temperature at 6:00PM the **evening prior** to the event is 40 degrees or higher, as per the [BOM Adelaide Forecast](#), then the following will apply:

Event	Grade/Division	Length of Game	Run Limit	Mercy
Game	Division 1 (single game)	<b>Game time: 11:00AM</b> 7 innings or 120 minutes (no new innings to start after 120 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 1 (double header)	<b>Game 1 time: 11:00AM</b> 7 innings or 120 minutes (no new innings to start after 120 min) <b>Game 2: Cancelled</b>	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 2	Game rescheduled to week following 'heat out' as a Twilight at 6:00PM. Baseball SA to advise midweek date.		
Game	Division 3	Cancelled. Baseball SA will not reschedule game.		
Game	Division 4	Cancelled. Baseball SA will not reschedule game.		
Game	Division 5	Cancelled. Baseball SA will not reschedule game.		
Game	Division 6	Cancelled. Baseball SA will not reschedule game.		
Game	Division 7	Cancelled. Baseball SA will not reschedule game.		
Game	U11	Cancelled. Baseball SA will not reschedule game.		
Game	U13	Cancelled. Baseball SA will not reschedule game.		
Game	U15	Cancelled. Baseball SA will not reschedule game.		
Game	U17	Cancelled. Baseball SA will not reschedule game.		
Game	U9	Cancelled. Baseball SA will not reschedule game.		
Game	Don Rice	Cancelled. Baseball SA will not reschedule game.		
Game	Women's	Cancelled. Baseball SA will not reschedule game.		
Game	Masters	Cancelled. Baseball SA will not reschedule game.		
Carnival	Tball	Cancelled. Baseball SA will not reschedule carnival.		
Training	Juniors	Cancelled.		
Training	Seniors	Cancelled.		
Trials	Charter/State	Cancelled. Baseball SA will reschedule.		

**COMMUNICATION:** Baseball SA will announce that the Hot Weather Policy is in effect soon after 6:00PM on the Baseball SA Website (via a scrolling banner on the home page) and Baseball SA Facebook Page which we encourage all Clubs to share.

**NEW INNINGS:** No new innings to start after the time limit listed above, with the time being the moment the third out of the previous innings occurs.

**TIED GAMES:** If, after the designated number of innings, teams are tied and the allotted time has not been reached at the time of the 3<sup>rd</sup> out, the game may continue to a result until time is reached.

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**HEAT POLICY FOR EVENING EVENTS WITH AN ACTUAL TEMPERATURE OF 37° to 39.9°:**

This includes any training, trials, games or events scheduled during the *evening* (meaning an event that is scheduled to start from 6:00PM).

If the **actual** temperature at 4:00PM the **afternoon of** the event is 37.0 to, and including, 39.9 degrees, as per the [BOM Adelaide Observations](#), then the following will apply:

Event	Grade/Division	Length of Game	Run Limit	Mercy
Game	Division 1	7 innings or 120 minutes (no new innings to start after 120 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 2	7 innings or 90 minutes (no new innings to start after 90 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 3	7 innings or 90 minutes (no new innings to start after 90 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 4	7 innings or 90 minutes (no new innings to start after 90 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 5	5 innings or 90 minutes (no new innings to start after 90 min)	5 run limit	6 runs in front during, or at the completion of, the 4 <sup>th</sup> innings
Game	Division 6	5 innings or 90 minutes (no new innings to start after 90 min)	5 run limit	6 runs in front during, or at the completion of, the 4 <sup>th</sup> innings
Game	Division 7	5 innings or 90 minutes (no new innings to start after 90 min)	5 run limit	6 runs in front during, or at the completion of, the 4 <sup>th</sup> innings
Game	Women's	5 innings or 90 minutes (no new innings to start after 90 min)	4 run limit	5 runs in front during, or at the completion of, the 4 <sup>th</sup> innings
Game	U11	4 innings or 60 minutes (no new innings to start after 60 min)	3 run limit	No Mercy Rule
Game	U13	5 innings or 75 minutes (no new innings to start after 75 min)	4 run limit	5 runs in front during, or at the completion of, the 4 <sup>th</sup> innings
Game	U15	6 innings or 75 minutes (no new innings to start after 75 min)	6 run limit	7 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	U17	6 innings or 75 minutes (no new innings to start after 75 min)	6 run limit	7 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Don Rice	7 innings or 90 minutes (no new innings to start after 90 min)	6 run limit	7 runs in front during, or at the completion of, the 6 <sup>th</sup> innings
Game	U9	Cancelled. Baseball SA may reschedule game.		
Game	Masters	Cancelled. Baseball SA may reschedule.		
Carnival	Tball	Cancelled. Baseball SA may reschedule.		
Training	Juniors	Can be scheduled for 6:00PM or later, limit physical activity to 60 minutes with regular breaks.		
Training	Seniors	Can be scheduled for 6:00PM or later, limit physical activity to 60 minutes with regular breaks.		
Trials	Charter/State	Can be scheduled for 6:00PM or later, limit physical activity to 60 minutes with regular breaks.		

**COMMUNICATION:** Baseball SA will announce that the Hot Weather Policy is in effect soon after 4:00PM on the Baseball SA Website (via a scrolling banner on the home page) and Baseball SA Facebook Page which we encourage all Clubs to share.

**NEW INNINGS:** No new innings to start after the time limit listed above, with the time being the moment the third out of the previous innings occurs.

**TIED GAMES:** If, after the designated number of innings, teams are tied and the allotted time has not been reached at the time of the 3<sup>rd</sup> out, the game may continue to a result until time is reached.

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## HEAT POLICY FOR *EVENING* EVENTS WITH AN ACTUAL TEMPERATURE OF 40° OR ABOVE:

This includes any training, trials, games or events scheduled during the *evening* (meaning an event that is scheduled to start from 6:00PM).

If the **actual** temperature at 4:00PM the **afternoon of** the event is 40 degrees or above, as per the [BOM Adelaide Observations](#), then the following will apply:

Event	Grade/Division	Length of Game	Run Limit	Mercy
Game	Division 1	7 innings or 120 minutes (no new innings to start after 120 min)	No run limit	10 runs in front during, or at the completion of, the 5 <sup>th</sup> innings
Game	Division 2	Cancelled. Baseball SA may reschedule game.		
Game	Division 3	Cancelled. Baseball SA will not reschedule game.		
Game	Division 4	Cancelled. Baseball SA will not reschedule game.		
Game	Division 5	Cancelled. Baseball SA will not reschedule game.		
Game	Division 6	Cancelled. Baseball SA will not reschedule game.		
Game	Division 7	Cancelled. Baseball SA will not reschedule game.		
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## South Australian Baseball League Inc.

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# BASEBALL SA JUNIOR PLAYER HOT WEATHER POLICY CONSENT FORM

For junior players of League Age 15 and 16 who elect to play Senior Division 1 or below or Women's League Division 1, and for junior players of League Age 13 and 14 who elect to play Women's League Division 2 when the Baseball SA Hot Weather Policy is enforced.

Player's Name: \_\_\_\_\_

Player's Date of Birth: \_\_\_\_\_

Player's League Age: 13 / 14 / 15 / 16 (please circle one)

Player's Club: \_\_\_\_\_

Player's Senior Division: \_\_\_\_\_

I, \_\_\_\_\_, being the parent/guardian of the above player, acknowledge that there may be an increased risk of heat associated conditions should my son/daughter participate in the abovementioned Senior Division. This consideration notwithstanding, I believe the above junior player is of a sufficient standard of fitness to partake in a Senior Division game that has Hot Weather Policy restrictions and hereby give my consent for the above junior player to play baseball in the nominated Senior Division. I understand that signing this form provides consent for the full season.

Parent or Guardian's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Once completed, please ensure a copy is given to the consenting parent or guardian, a copy is emailed to Baseball SA at [competitions@baseballsa.org.au](mailto:competitions@baseballsa.org.au) and the original is given to the player's Coach for presentation to the officiating umpire at game plate meetings when the Baseball SA Hot Weather Policy is enforced. A printable copy of this form can be found on the Baseball SA website > Info Hub > Policies and Procedures > Policies > Hot Weather Policy.



### » What is heat stress?

Vigorous exercise in sport places some people at risk of heat illness. Even in cool weather, heat illness may occur in those exercising at high intensity for more than 45 minutes. Heat illness may also occur with prolonged exposure to hot weather.

The risk of heat illness is increased in hot and humid weather because:

- People may not be able to produce enough sweat for adequate cooling.
- High humidity may prevent adequate evaporation of sweat.

Heat illness is not a trifling matter – if untreated, it can lead to the rare but life-threatening condition of heat stroke.

In hot weather, we need to take more precautions, especially as we need to exercise or play sport regularly to stay healthy.

This brochure will help to recognise and manage potentially dangerous situations that may arise during participation in sport or physical activity in hot conditions – **or where exertion levels are out of the ordinary.**

By understanding the causes of heat illness event organisers, coaches, officials, players and the general public can take common sense steps to enjoy sport and physical activity and minimise the extra risks arising during hot or humid weather. (For more details, download a copy of the Sports Medicine Australia Hot Weather Guidelines from [www.sma.org.au](http://www.sma.org.au))

### » Keep the “fun” in Fun Runs

The highest incidence of sports heat illness occurs in fun runs of 10 km and longer.

Running at an intensity close to exhaustion, and much greater than training pace, entails a risk of heat illness. Setting targets helps achieve goals, but athletes pushing themselves close to exhaustion and who ignore the symptoms of heat illness to finish in a personal best can risk serious injury.

Run within personal limits. If feeling overstressed or unwell, slow down or stop. If you see another runner who appears unwell persuade them to stop and assist them.

### » How do you tell if someone has heat illness?

Heat illness occurs in strenuous sports, but may also occur in activities such as cricket, golf, and lawn bowls with prolonged exposure to hot weather. During sports activities participants should “listen to their bodies”. If they start to experience any of the following symptoms or signs they should stop immediately.

#### Symptoms of heat illness may include:

- Light headedness, dizziness.
- Nausea.
- Obvious fatigue.
- Cessation of sweating.
- Obvious loss of skill and coordination/clumsiness or unsteadiness.
- Confusion.
- Aggressive or irrational behaviour.
- Altered consciousness.
- Collapse.
- Ashen grey pale skin.

Heat illness in sport presents as heat exhaustion or heat stroke. Heat exhaustion is the more common sports-related heat illness. Heat stroke is rare, but it is a life threatening condition.

**Heat exhaustion.** Participants who collapse **after** exercise, are likely suffering from a post-exercise drop in blood pressure (postural hypotension), but some may have heat stroke.

**Heat stroke.** Those who show signs of altered mental function, loss of consciousness or collapse **during** exercise are likely suffering heat stroke. Sports participants showing signs of confusion, loss of skill, loss of coordination or irrational behaviour should be stopped and removed from the field immediately.







### Some Golden Rules for Training and Competition

- Achieve a high level of physical fitness before exercising strenuously in competition, or in warm weather.
- Exercise at moderate intensity in hot or humid conditions.
- Do not undertake hard exercise, or exercise in hot or humid weather if you feel unwell or are recovering from recent illness.
- Drink water before and during exercise.
- Stop exercise if you feel unwell when exercising hard, or if exercising in hot or humid weather.
- Stop other sports participants if they appear unwell, confused or show loss of skill and coordination.

#### » Factors that increase the risk of heat illness include:

- High exercise intensity e.g. exercising close to personal capacity.
- Lack of fitness (due to insufficient training that includes some at competition intensity and duration).
- Previous history of heat illness or heat intolerance.
- Aged over 65.
- High air temperature and high humidity (see tables).
- Low air movement/no wind, following wind in road running.
- Prolonged exposure to hot conditions.
- Heavy clothing and protective equipment e.g. padding.
- Lack of acclimatisation (due to lack of recent training in warm and humid conditions).
- Dehydration (inadequate water intake before exercise and during activity longer than 60 minutes).
- Illness and medical conditions (current or recent infectious illness, chronic health disorders).

#### » What steps can be taken to minimise the risk of heat illness?

##### 1. Acquiring adequate fitness and acclimatisation

Excellent physical fitness arising from regular endurance training, and acclimatisation to heat from regular training in warm conditions, markedly increase heat tolerance.

Acclimatisation for sports activities requires at least 5 days of training in hot or humid conditions, progressing from moderate intensity and duration as acclimatisation develops. In summer, acclimatisation develops naturally as the weather becomes warmer and more humid.

##### 2. Adjusting training and competition intensity to conditions

Exercise intensity in training should be appropriate to current fitness and weather; for example, moderate intensity and duration for pre and early season training of unconditioned players in warm weather. In conditions of increased risk participants should be provided with opportunities to rest through the use of player interchange or substitution. In moderate risk conditions players should be rested for at least 10 minutes per hour. In high risk conditions players should be rested for at least 15 minutes in an hour.

This strategy could include shortening the whole game or activity by the appropriate period of time.

The benefits of rest breaks should be maximised by:

- Reducing clothing and resting in shade provided by trees, buildings or portable structures.
- Assisting evaporative cooling with fans; wetting the skin, applying ice packs to groin and armpits also helps.
- Drinking cool water or sports drinks.
- Withdrawing players who feel unusually fatigued or who appear distressed from the activity.

##### 3. Timing of games or activity

Training and competition involving moderate to high intensity exercise should be scheduled to avoid the hottest part of the day. Early morning or night games or exercise training reduce the risk of encountering stressful conditions.

##### 4. Clothing

Clothing for strenuous exercise, and sport in warm conditions, should allow easy **evaporation of sweat from the skin**. It should be light coloured, light weight and loose fitting, and provide protection against the sun.

##### 5. Modifying warm-up

In hot conditions, the duration and intensity of a warm-up should be reduced to minimise the increase in body heat and temperature before competition.

### Children and Heat Stress

Children sweat less and get less evaporative cooling than adults. In warm and hot weather they have greater difficulty getting rid of heat; they look flushed, and feel hotter and more stressed than adults. Overweight children are particularly disadvantaged exercising in warm weather.

Children seem to be effective at "listening to their bodies" and regulating their physical activity. For this reason, children should always be allowed to exercise at their preferred intensity. They should never be urged to exercise harder or compelled to play strenuous sport in warm weather. If children appear distressed or complain of feeling unwell, they should stop exercising.

In warm weather wet sponging will make children feel more comfortable.

Drinks should be provided for children playing sport.

## 6. Drinking (Hydration)

Substantial amounts of water are lost through sweating when exercising vigorously in the heat. During strenuous exercise sports people often replace only half their sweat losses, but they tolerate moderate levels of dehydration well.

To minimise dehydration, drink about two cups of water in the 2 hours before exercising. During exercise lasting 60 minutes or longer, 2-3 cups (500-750 ml) of cool water or sports drink per hour are sufficient for most sports.

Dehydration is rarely the sole cause of sports heat illness, but maintaining an adequate water intake assists temperature control. Carbohydrate and electrolytes in sports drinks help to maintain performance in endurance events.

Water intake exceeding sweat loss in events lasting several hours can lead to the harmful condition of hyponatraemia (low blood sodium).

## 7. Heat waves, unusually hot weather and travelling

Extra caution needs to be taken during unseasonal heat waves or unusually hot or humid weather, or if travelling from a cool region to a hot or humid climate. In these circumstances athletes lack acclimatisation and are at increased risk of heat illness if they exercise at their cool climate intensity.

## 8. Other considerations

Age and medical conditions:

- If you have recently experienced a high temperature, infection, diarrhoea, or vomiting you should NOT take part in strenuous exercise.
- People over 65 or who suffer from a variety of medical conditions, who are taking medication or who are pregnant may experience difficulties exercising in the heat. Examples include, asthma, diabetes, heart conditions, epilepsy, overweight and obesity. Medication may also include those purchased over the counter. If you are unsure of their effect, ask your doctor or pharmacist.

### » **Treating heat illness**

#### Heat exhaustion

Sports heat exhaustion is characterised by low blood pressure at the cessation of exercise. Victims suffer a faint-like collapse with ashen-grey skin. Athletes with heat exhaustion usually recover rapidly on lying down with legs raised. Because the difference between simple heat exhaustion and the high risk of heat stroke is not always obvious, athletes who have collapsed following strenuous exercise should be cooled as outlined opposite.

#### Heat stroke

Heat stroke is a condition in which body temperature control is impaired. Heat stroke can lead to devastating injuries and is potentially fatal. The severity of complications of heat stroke increases with the duration of high body temperature. Immediate first aid is essential and life-saving. The aim is to lower body temperature rapidly.

**» Dehydration is rarely the sole cause of sports heat illness, but maintaining good hydration assists temperature control**

### **If a sports participant is exhibiting signs of heat illness take the following action:**

- Remove from the field.
- Lay the person down in a cool place.
- Raise legs and pelvis to improve blood pressure.
- Remove excess clothing.
- Cool by wetting skin liberally and vigorous fanning (evaporative cooling).
- Apply ice packs to groin, armpits and neck.
- Give cool water if conscious.

Persons suffering from heat exhaustion usually recover rapidly with this assistance:

- If the athlete remains seriously ill, confused, vomiting or shows signs of altered consciousness call an ambulance immediately and seek medical help. If in doubt, treat for heat stroke.

Treat for heat stroke:

- Continue cooling. If available, cool in a shallow canvas/ plastic bath of iced water (5-10 minutes.)
- If necessary cooling should continue during removal to hospital.

Note: following exercise body temperature can be measured reliably only in the rectum because the mouth and armpit seriously underestimate true body temperature. Rectal temperature greater than 41°C is dangerous. Rectal temperature should only be measured by a doctor or nurse.

### » **Hats and sunscreen**

Wear well-vented broad brim hats and water-soluble sunscreen for sun protection. Caps do not provide adequate sun protection.

## **Guidelines to Environmental Conditions and Risk**

Remember, sports heat illness can occur with high intensity exercise in cool conditions and with well-hydrated participants.

Because sports heat stress is complex, and because individual responses to heat stress vary, it is not possible to provide overall recommendations about limiting conditions to cover all sports. Since heat stress increases with increasing exercise intensity, potential for heat illness may be rated according to the exercise characteristics of the sport. The following sports are rated by decreasing levels of sustained exertion and therefore decreasing potential for risk of heat illness.

1. Endurance running in competition or training (higher intensity/higher risk)
2. Football codes and hockey
3. Tennis
4. Cricket (lower intensity/lower risk)

Individual tolerance to heat stress varies widely. Discomfort is the best personal indication of heat stress. Even in team sports individuals should pace themselves according to their personal feelings of stress. In warm weather if you feel uncomfortably hot reduce exercise intensity. In humid conditions sweat may not evaporate sufficiently for effective cooling; if your skin is dripping wet all over with sweat, reduce exercise intensity.

The following tables provide estimates of risk related to the weather and also guidelines to managing activity in order to minimise heat stress.

### » Ambient temperature

Easily understood, most useful on hot, dry days.

Ambient temperature °C	Relative humidity	Risk of heat illness	Recommended management for sports activities
15 - 20		Low	Heat illness can occur in running Caution over-motivation
21 - 25	Exceeds 70%	Low - moderate	Increase vigilance Caution over-motivation
26 - 30	Exceeds 60%	Moderate - high	Moderate early pre-season training Reduce intensity and duration of play/training Take more breaks
31 - 35	Exceeds 50%	High - very high	Uncomfortable for most people Limit intensity, take more breaks Limit duration to less than 60 minutes
36 and above	Exceeds 30%	Extreme	Very stressful for most people Postpone to cooler conditions (or cooler part of the day) or cancel

» Heat stress increases with increases in air temperature but be aware that there are not clear demarcations in risk between temperature ranges. At relative humidity levels above those indicated in the table, stress increases markedly.

Further guidance might be gained from the Wet Bulb Globe Temperature (WBGT) index. The WBGT is useful when humidity is high.

### » WBGT

Suitable for hot, humid days.

WBGT	Risk of heat illness	Recommended management for sports activities
Less than 20	Low	Heat illness can occur in distance running Caution over-motivation
21 - 25	Moderate - high	Increase vigilance Caution over-motivation Moderate early pre-season training Take more breaks
26 - 29	High - very high	Limit intensity, take more breaks Limit duration to less than 60 minutes per session
30 and above	Extreme	Consider postponement to a cooler part of the day or cancellation (allow swimming)

### » Check local weather conditions

The Bureau of Meteorology provides detailed information about temperature conditions (both ambient and WBGT), wind speed and relative humidity for many regions in Australia ([www.bom.gov.au](http://www.bom.gov.au)).

**Acknowledgement:** This brochure was produced by an SMA project team led by Dr John Brotherhood and supported by the Australian Government Department of Health and Ageing.



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