

# Softball Australia Adverse Weather Policy

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# SOFTBALL AUSTRALIA ADVERSE WEATHER GUIDELINES

## 1 Introduction

Softball Australia has a responsibility to take a positive leadership role in educating and increasing the awareness of its participants towards the dangers of physical activity in the heat and during extreme weather conditions. With this in mind, Softball Australia's Adverse Weather Policy has been developed which enhances the guidelines produced by Sports Medicine Australia

The purpose of this Adverse Weather Policy document is to outline the standards and guidelines regarding the management of Adverse Weather in Softball in Australia.

This policy is for all participants involved in softball, including players, officials, umpires, coaches, parents, volunteers, staff and spectators.

Member States and Territories, Clubs and Associations are required to adhere to Softball Australia's Adverse Weather Policy, Softball Australia's regulation relating to interruptions to a game at an Australian Championship (as detailed in Softball Australia's Operations Manual – refer to Appendix A), and the educational resources produced by Sports Medicine Australia to develop their own guidelines that incorporate any local competition by-laws or regulations that may be in place in relation to the modification, suspension or cancellation of training activities, competitions or events due to adverse weather conditions.

## 2 Extreme weather

Extreme weather may be defined as weather that threatens the immediate or long-term safety of individuals, as a result of rain, hail, lightening, wind chill or heat.

The risk is determined in conjunction with Sport Medicine Australia's Guidelines as well as the Bureau of Meteorology's forecast conditions.

Weather condition	Extreme weather determinant
Ambient temperature	> 36 <sup>o</sup> Celsius
Wet bulb globe temperature (shade)	> 30
Apparent temperature (wind chill)	< 2 <sup>o</sup> Celsius
Wind speed	> 40km per hour
Rainfall	> 80mm within 24 hours

Notes:

Wind may create additional hazards in regard to trees, branches or other materials becoming projectiles. Rain also needs to be considered in relation to its impact on the safety of the playing surface.

## 3 UV exposure and heat illness

The sun's UV is both the major cause of skin cancer and an important source of vitamin D. It is recommended that sport and recreation settings take a balanced approach to UV exposure that reflects the varying levels of UV throughout the year and across Australia.



Overexposure to UV can cause skin damage (including tanning and sunburn), eye damage and skin cancer. The good news is that skin cancer is largely preventable. Sport and recreation providers can reduce the risk associated with UV overexposure by implementing some simple preventative strategies.

Whenever UV levels reach three and above, sun (UV) protection is needed. During this time, use a combination of five sun protection measures:

1. **Slip** on sun-protective clothing – that covers as much skin as possible.
2. **Slap** on SPF30/50+ sunscreen and lip balm – make sure it is broad spectrum and water-resistant. Apply sunscreen 20 minutes before going outdoors and every two hours afterwards.
3. **Slap** on a hat – that protects your face, head, neck and ears.
4. **Seek** shade.
5. **Slide** on some sunglasses – make sure they meet the Australian standard.

Even if you cannot utilise some of these points when playing, ensure that you follow them in off-diamond activities.

You can easily find the daily UV alert by checking the newspaper or looking on the SunSmart [sunsmart.com.au](http://sunsmart.com.au) or Bureau of Meteorology [bom.gov.au](http://bom.gov.au) websites.

For further information relating to UV exposure and heat illness, visit [smartplay.com.au](http://smartplay.com.au).

## Heat illness

Heat illness can occur when a participant exercises vigorously in hot conditions. It may also occur with prolonged exposure to hot weather, even if activity is low intensity. In cool weather, heat illness can also present when exercising at high intensity.

Heat illness in sport presents as **heat exhaustion** (more common) or **heat stroke** (rare but life threatening). Symptoms may include light-headedness, dizziness, nausea, obvious fatigue or loss of skill and coordination, unsteadiness, cessation of sweating, confusion, aggressive or irrational behaviour, collapse or ashen grey pale skin.

Responses to heat vary; it is not possible to provide overall recommendations about limiting conditions in hot weather. However, heat illness can be prevented by knowing the risk factors and applying prevention strategies to minimise risk. Factors that increase the risk of heat illness include:

- high exercise intensity (eg exercising close to your personal capacity)
- lack of fitness (eg exercising at an intensity or duration beyond your current capacity)
- previous history of heat illness or heat intolerance
- age – junior and veteran participants are at higher risk due to their age
- illness and medical conditions (eg current or recent infectious illness or chronic health disorders at any age)
- high air temperature and high humidity (see Heat Illness Chart below)
- low airflow or movement (no wind)
- prolonged exposure to hot conditions, heavy clothing and protective clothing (eg padding)
- lack of acclimatisation to being active in warm and humid conditions
- dehydration (inadequate water intake before exercise and during activity longer than 60 minutes)
- radiant heat from surfaces such as black asphalt, concrete or black rubberised synthetic surfaces can intensify hot conditions.



## 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.

## Heat Illness Chart

The **Heat Illness Chart** is a guide to the relationship between ambient temperature and the risk of heat illness. When observing this Chart, consider:

- there are not clear demarcations in risk between temperature ranges
- stress increases with rising air temperature and relative humidity
- at low ambient temperatures the body can cope with higher humidity than at high ambient temperatures
- stress increases with relative humidity as it becomes more difficult to regulate body temperature due to a decrease in the evaporation of sweat (a mechanism used to keep the body cool in the heat and while exercising)
- individual risk factors including acclimatisation to local conditions.

## 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.

## WBGT

Further guidance might be gained from the Wet Bulb Globe Temperature (WBGT) index. The WBGT is particularly useful for hot, humid days.



WBGT	Risk of heat illness	Recommended management for sports activities
Less than 20	Low	Heat illness can occur in 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 information on local weather conditions and observations including temperature, UV, wind speed and thermal comfort. Weather warning, including heatwaves, fire and storms can be viewed at [bom.gov.au](http://bom.gov.au) and should be considered as part of any club's safety plan. The provision of safety personnel able to identify, treat and manage heat illness is also an important part of this planning.

## 4 Heat Policy

For competitions occurring solely indoor, an Indoor Heat Policy will operate slightly differently to that at an outdoor competition. Temperature readings will be taken by the Wet Bulb Globe Temperature (WBGT) only.

This is deemed to be the most applicable test for the conditions inside a stadium, away from direct sunlight and with humidity a determining factor.

WBGT (shade)	Risk of thermal injury	Action – Juniors (U18 and below)	Action – Seniors/Open age	Action – Masters
<20 Low	Heat illness can occur in distance running	Caution over-motivation	Caution over-motivation	Caution over-motivation
21 – 25	Moderate to high	Increase vigilance. Caution over-motivation, take more breaks	Increase vigilance. Caution over-motivation, take more breaks	Increase vigilance. Caution over-motivation, take more breaks
26 – 29	High – Very high	Limit intensity. Limit duration to less than 50 minutes per session. Take more breaks for longer. Consider postponing to a cooler part of the day or cancellation (28-20 degrees)	Limit intensity. Limit duration to less than 60 minutes per session. Take more breaks and for longer.	Limit intensity. Limit duration to less than 60 minutes per session. Take more breaks and for longer. consider postponing to a cooler part of the day or cancellation (28-20 degrees)
30-33	Extreme	Postponement to a cooler part of the day or cancellation.	Consider postponing to a cooler part of the day or cancellation. Limit intensity. Limit duration to less	Postponement to a cooler of the day or cancellation



WBGT (shade)	Risk of thermal injury	Action – Juniors (U18 and below)	Action – Seniors/Open age	Action – Masters
			than 60 minutes per session. Take more breaks and for longer.	
34 and above	Extremely dangerous	Postponement / cancellation	Postponement / cancellation	Postponement / cancellation

### Testing/Reading

**Option1:** Where possible a handheld Temperature & Humidity reader would be recommended for all temperature testing. Testing with a handheld Temperature & Humidity reader should be conducted on or next to the field/court of play (i.e. in front of technical bench, if there is one).

**Option 2:** Where a handheld Temperature & Humidity reader is not available, GBT readings should be taken at the closest testing station to the facility from The Bureau of Meteorology (BOM). You can check these readings at [bom.gov.au/info/thermal\\_stress/index.shtml](http://bom.gov.au/info/thermal_stress/index.shtml). For consistency, this location will be used for reading throughout the duration of the match or competition.

When using the readings from BOM, refer to WBGT Shade Test (not sun).

### Extension of breaks

If the reading of the WBGT exceeds 60°C, the completion of that period of play will occur. The Tournament Director or Club Official will need to enforce the following alterations to matches:

- Extend quarter time breaks from one minute to two minutes.
- If deemed necessary by the Tournament Director of competition body. Half time can also be extended by two minutes, making it a five minute break.
- Training sessions are to be broken up to incorporate drink breaks. No session is to go longer than 60 minutes. This will allow players, team staff and officials an opportunity to rehydrate.

### Suspension of matches

If the reading of the WBGT exceeds 34°C for senior/open age or 30°C for junior and masters competitions, all matches in progress will be suspended at the completion of that period of play.

No new matches will begin until the WBGT reading is less than 30°C for seniors/open age; below 30 for junior and master competitions

The Tournament Director or competition organisers will communicate to all team managers, the changes to fixtures and any ongoing impacts.

## 5 UV heat exposure and heat illness checklist

### Schedules, fixtures, rule modifications and cancellation policy

- ☐ Where possible, training, events and competitions are scheduled to minimise exposure to UV levels of three and above and avoid high temperatures.
- ☐ Cancellation of training, events or competition occurs when high-risk conditions are forecast.





Where it is not possible to avoid peak UV and heat periods, the following interim steps are taken to minimise the risk of overexposure to UV and heat illness:

- ☐ The duration of the match, warm-up, training or other activity is reduced and has limited intensity where applicable.
- ☐ Scheduling of activities to start earlier in the morning or later in the evening thus avoiding high-risk UV exposure times.
- ☐ Increase and/or extend the number of rest breaks and opportunities to seek shade and refreshments.
- ☐ Rotate officials out of the sun more frequently than usual. Be aware that older volunteers may be at an increased risk of heat illness.
- ☐ Increase the number of player rotations within a game.
- ☐ Hold activity at an alternative venue or reschedule wherever possible.
- ☐ Officials, coaches and senior members are to act as role models by wearing sun-protective clothing and hats, applying sunscreen and seeking shade wherever possible.

## Shade

- ☐ Conduct an assessment of the existing shade available at outdoor venues. Identify whether the shade is appropriate or needs improvement.
- ☐ Utilise shade available from buildings, trees and other structures where possible. These can be used for player interchanges, between activities or as spectator areas. Ensure that these identified areas provide shade when games are played.
- ☐ Provide areas of rest in shaded areas for spectators and individuals when not actively participating or playing. This may include the interchange bench or off-diamond officials.
- ☐ Where necessary, interchange and presentation ceremony areas are to be protected by shade.
- ☐ Participants and officials rotate to cooler, shaded areas.
- ☐ Ensure when there is insufficient natural or built shade, temporary shade structures are provided and/or participants and spectators notified to bring their own temporary shade structures, such as umbrellas.

## Clothing

- ☐ Officials, volunteers and players must ensure that when off-diamond that sun protection is addressed such as wearing a wide brimmed hat and sunglasses.
- ☐ Ensure that playing uniform and other parts of clothing are loose fitting and lightweight where possible.



- ☐ Participants without appropriate protective clothing should not be permitted to spend extended periods exposed to UV levels of three and above.

### **Sunscreen**

- ☐ SPF30+ broad spectrum, water resistant sunscreen is promoted and/or provided to participants
- ☐ Sunscreen is stored below 30°C and replaced once it is past the use-by-date.
- ☐ Participants are encouraged to apply sunscreen 20 minutes before training or playing and reapply every two hours.
- ☐ For best protection, participants are encouraged to apply a generous amount of sunscreen (the equivalent of one teaspoon per limb).

### **Airflow**

- ☐ Airflow is maximised at training and competition venues, specifically indoors (eg doors and windows are opened or marquee walls removed).
- ☐ Spaces with air-conditioning or fans are made available in high risk conditions.

### **Hydration**

- ☐ All participants (including players, coaches and officials) are required to bring their own clearly labelled drink bottle.
- ☐ Cool clean water is available to all participants.
- ☐ All those involved are aware that they need to be well hydrated before participating in physical activity.
- ☐ Flexible drink breaks are provided in hot or humid conditions.
- ☐ Individuals are permitted to drink between breaks at their own discretion.

### **Education and information**

- ☐ The UV exposure and heat illness guidelines are displayed in a prominent location (eg website or noticeboard)
- ☐ The times when UV protection is required (as indicated by a newspaper and/or the SunSmart website) and the Sports Medicine Australia heat illness chart are displayed in a prominent location.
- ☐ Links to SunSmart [sunsmart.com.au](http://sunsmart.com.au) and Smartplay [smartplay.com.au](http://smartplay.com.au) are included on our website.
- ☐ Participants are notified at the beginning of September that UV levels will generally be three and above between 10am – 3pm and sun (UV) protection measures need to be



implemented.

- ☐ Participants are notified at the start of May that sun (UV) protection measures are no longer required unless UV index levels reach three and above.
- ☐ UV protection and heat illness prevention messages are included in event programs and newsletters.
- ☐ Announcements and/or notifications are made to remind all involved of key UV and heat illness prevention measures.
- ☐ Clubs or Officials are responsible for identifying what the UV level is going to be and remind athletes at the training or match the precautions to be taken.

### **First Aid**

- ☐ The first aid kit includes a supply of SPF30+ broad spectrum, water resistant sunscreen.
- ☐ Trained first aid personnel or sports trainers are present at training and events to manage sunburn and heat illness.
- ☐ Contact details of the closest medical assistance are displayed in a prominent location (eg first aid room or canteen).
- ☐ Any participant feeling discomfort or distress is monitored and evaluated by trained safety personnel.
- ☐ Ice, fans and water spray bottles are available as cooling aids.

### **Individual risk factors**

- ☐ Information on participants' medical conditions and medical history is collected (according to privacy legislation).
- ☐ A record of injuries (including heat illness) is kept.
- ☐ Age, fitness, skin characteristics, acclimatisation, gender and medical conditions are considered when making decisions.
- ☐ If in doubt, an individual is advised to see a medical professional for clearance to participate.

## **6 Air quality**

Smoke and poor air quality can present a health risk to both recreational and high performance athletes. Current health status and previous medical conditions can play a major factor on how an impact air quality can have on an individual. Current public health advice is aimed at high-risk groups, including people over 65, children 14 years and younger, pregnant women and those with existing heart or lung conditions. Athletes involved in high performance sport can also be at increased risk while performing high intensity prolonged exercise outdoors and additional caution should be taken.



During exercise, respiratory rate and volume increases, this in turn increases the total airway exposure to pollutants.

Because of the dangers associated with poor air quality, Softball Australia adopts the guidelines set by the Australian Institute of Sport (AIS as at 2 April 2020). These guidelines can be found here: [https://ais.gov.au/position\\_statements#smoke\\_pollution\\_and\\_exercise](https://ais.gov.au/position_statements#smoke_pollution_and_exercise).

Conversely, you can find an abbreviated version under Appendix Item B of this document.

## 7 Hail

All hailstorms present some risk to players in an open playing field, and the size and intensity of the storm can change dramatically in a short period of time.

All play should be suspended during hail storms so that players and officials can seek suitable shelter.

It is important to also be aware of any significant temperature drop, rainfall and increased wind that may be associated with the hail conditions.

Play should be restarted after the hail has stopped falling, with particular attention being given to the amount of ice on the playing surface (size and thickness of layer). In some cases it may be unsafe to resume play immediately due to an ice covered surface. Deferral of the restart to allow melting (or manual clearing in parts) should be considered in extreme circumstances.

## 8 Lightning

Lightning is the visible part of an electrical discharge. Thunder is the resulting sound from the rapid expansion of the air after this electrical discharge. Sound follows light at 0.34 km/sec. Check the forecast and watch the sky. Darkening skies, flashes or lightning, or increasing wind may indicate an approaching storm.

### Lightning safety tips

- Use the **30/30 Lightning Rule**. If the time between the lightning flash and the thunder sound is less than 30 SECONDS then play should be suspended, and not resumed until 30 MINUTES after the last thunder (30 seconds relates to 10 kilometres away).
- Find safe shelter. Sturdy buildings are the safest place to be during lightning storms. Avoid sheds, picnic shelters, metal coaching boxes and goals. Staying in a car with windows closed also offers some protection.

**Note:** Thunder is not usually heard 24-32 kilometres from the lightning strike. See Softball Australia's Lightning Strikes Guidelines for further information.

## 9 Chill

Extreme weather can produce two chill risks: the absolute air temperature and the wind chill factor. Of these, wind chill in winter sports is the more significant risk.

Apparent Temperature (AT) is an adjustment to the actual air (ambient) temperature based on the perceived effect of the extra elements such as humidity and wind. AT is valid over a wide range of temperatures, and it includes the chilling effect of the wind at lower temperatures.

Minus 2°C (AT) is the point where play should be suspended for wind chill factor.

When using the AT as a wind chill indicator, the model assumes an appropriately dressed adult for those conditions. If clothing were to get wet, the cooling effect would be greater than that predicted by the model, and the chance of hypothermia would be greater than indicated by the AT. In wet, windy conditions,



someone wearing inadequate clothing can become hypothermic in quite mild conditions. The risk also increases for children.

## **10 Useful resources**

**UV Exposure and Heat Illness Guide**

**Hot Weather Guidelines: for sporting clubs and associations and the physically active**

**Beat the Heat: playing and exercising safely in hot weather**

**SunSmart Smartplay**

**Bureau of Meteorology**



## Appendix A

### Air Quality Index

Air Quality Index (AQI) is a general term given when evaluating the air quality at a specific location, over a 24 hour period. This monitors a number of pollutants:

- Fine and coarse particulate matter (PM2.5 & PM10)
- Carbon Monoxide
- Ozone

AQI standardises the information across these three categories, making air quality easier to divulge via a scale system.

### PM2.5 in $\mu\text{g}/\text{m}^3$

PM2.5 are very small particles usually found in smoke. They have a diameter of 2.5 micrometres (0.0025mm) or smaller. PM2.5 particles are a common air pollutant. Breathing in PM2.5 particles can have negative effects on your health. PM2.5 particles are small enough for you to breathe in deeply into your lungs. Sometimes particles can enter your bloodstream.

PM2.5 is measured at all air quality measuring sites in Australia. The other pollutants that make up the AQI are not measured everywhere in Australia. This means that PM2.5 has the relevance for providing standardised guidelines for all of Australia. **PM2.5 is also by far the most important air pollutant in smoky conditions.**

### Monitoring the PM2.5 levels at a specific location

There are three ways to get information on PM2.5 concentration levels (measured in  $\mu\text{g}/\text{m}^3$ ):

1. State and Territory air quality monitoring websites (hourly measures of PM2.5 concentration)
2. The AirRater App (or other similar App providing real time PM2.5 in  $\mu\text{g}/\text{m}^3$ )
3. A handheld portable device that measures PM2.5 in real time (if the club/competition has the resource available)

For clubs and competitions wishing to make decisions about whether it is safe to participate now, or over the next couple of hours, having real-time or hourly averages of PM2.5 is important.

**Table 1. – Guidelines for exercise in smoke affected environments (Australian Institute of Sport)**

Exercise Category	General Recommendations	Exercise-specific Recommendations	PM2.5 µg/m <sup>3</sup>
Good to exercise	<ul style="list-style-type: none"> <li>It's a good day to be outside</li> </ul>	<ul style="list-style-type: none"> <li>All forms of exercise are encouraged</li> </ul>	<25
Moderate (Caution for those who are sensitive to air pollution)	<ul style="list-style-type: none"> <li>The air is probably smoky</li> <li>Sensitive groups may experience symptoms like coughing or shortness of breath</li> <li>If you are sensitive to air pollution, spend less time outside in the smoke or dust and follow your treatment plan</li> <li>If you are worried about your symptoms, seek medical advice</li> </ul>	<ul style="list-style-type: none"> <li>If you are sensitive to air pollution, you may need to reduce prolonged high intensity endurance exercise (e.g. rowing, cycling, long-distance running)</li> <li>Most individuals will tolerate exercise as normal, without symptoms</li> </ul>	25–50
Poor conditions for exercise	<ul style="list-style-type: none"> <li>The air is probably very smoky</li> <li>Sensitive groups and/or others may experience symptoms like coughing or shortness of breath</li> <li>If you are sensitive to air pollution, spend less time outside in the smoke or dust and follow your treatment plan</li> <li>If you are worried about your symptoms, seek medical advice.</li> <li>Seek urgent medical help if anyone has trouble breathing or tightness in the chest. Call 000 for an ambulance</li> </ul>	<ul style="list-style-type: none"> <li>Consider reducing prolonged high intensity endurance activities (e.g. rowing, cycling, long-distance running)</li> <li>If you are sensitive to air pollution, avoid prolonged high intensity endurance exercise (e.g. rowing, cycling, long-distance running) or move it indoors</li> <li>Intermittent exercise (e.g. Hockey) may still be well-tolerated but athletes should be alert to symptoms</li> <li>Increase rest-to-activity ratio for intermittent exercise</li> </ul>	51–100
Very poor conditions for exercise	<ul style="list-style-type: none"> <li>The air is probably very smoky</li> <li>Sensitive groups and/or others may experience symptoms like coughing or shortness of breath</li> <li>If you are sensitive to air pollution, spend less time outside in the smoke or dust and follow your treatment plan</li> <li>If you are worried about your symptoms, seek medical advice</li> <li>Seek urgent medical help if anyone has trouble breathing or tightness in the chest. Call 000 for an ambulance</li> </ul>	<ul style="list-style-type: none"> <li>High intensity endurance activities (e.g. rowing, cycling, long-distance running) should be avoided or moved indoors</li> <li>Intermittent exercise (e.g. Hockey) may still be well tolerated but athletes should be alert to symptoms</li> <li>Increase rest-to-activity ratio for intermittent exercise</li> <li>Any individual may be affected by exercising in smoky air at these levels. If symptoms develop, cease exercise and move indoors</li> </ul>	101–150

Likely to be hazardous to exercise outdoors	<ul style="list-style-type: none"> <li>• The air is probably extremely smoky. Everyone will be at risk of experiencing symptoms like coughing or shortness of breath</li> <li>• Listen to your local emergency radio station or visit your State Emergency Agency for advice</li> <li>• Stay indoors away from smoke and dust</li> <li>• If you are sensitive to air pollution, follow your treatment plan. Close your windows and doors to keep smoke and dust out of your home</li> <li>• If you think the air in your home is uncomfortable, consider going to an air-conditioned building like a library or shopping centre for a break if it's safe to do so</li> <li>• If you are worried about your symptoms, seek medical advice</li> <li>• Seek urgent medical help if anyone has trouble breathing or tightness in the chest. Call 000 for an ambulance</li> </ul>	<ul style="list-style-type: none"> <li>• Most individuals should avoid physical activity outdoors</li> <li>• Where there is an intention to play organised high level sport and there are medical staff on site to advise, these levels of pollution should trigger a discussion between medical staff and officials about the advisability or otherwise of proceeding with the event</li> </ul>	> 150
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#### Activity levels based on visibility, air health category and smoke sensitivity

The following visibility guidelines should be considered in conjunction with the information from the above table. These visibility guidelines are based on those of the Victorian Environment Protection Authority.

#### Activity levels based on visibility, air health category and smoke sensitivity

The following visibility guidelines should be considered in conjunction with the information from the above table. These visibility guidelines are based on those of the Victorian Environment Protection Authority.



**Table 2. – Activity levels based on visibility (Victorian Environment Protection Authority)**

Visible landmark	Air health category	Activity levels – people sensitive to smoke	Activity levels – everyone else
About 20km	Good	It's a good day to be outside	It's a good day to be outside
About 10km	Moderate	It's okay to be outside but watch for changes in air quality around you	It's okay to be outside but watch for changes in air quality around you
About 5km	Poor	Reduce prolonged or heavy physical activity	Normal activity, but be alerted to changes in air
About 1.5km	Very poor	Avoid physical activity outdoors	Reduce prolonged or heavy physical activity
Less than 1.5km	Hazardous	If you can, stay indoors and keep physical activity levels as low as possible	Avoid all physical activity outdoors

**Additional information:**

- Consecutive days of exposure to polluted air can have an accumulative effect, lowering an athlete's threshold for symptoms. This should be considered if your region has been exposed to increased smoke for several days in succession.
- All athletes who suffer from asthma should have an updated asthma management plan and consult their doctor prior to exercising in smoke-affected environments.
- Recent respiratory infection increases the risk for development of smoke-related symptoms, even in non-asthmatics.



## Softball Australia Hot Weather Guidelines

### 1 Introduction

- 1.1 Softball is a summer sport and it is therefore inevitable some games will be scheduled for play during extreme heat conditions. All officials, coaches, managers and umpires owe a duty of care to players and officials and should take all reasonable steps to minimise foreseeable risks which may result in injury or damage.
- 1.2 High intensity exercise in a hot environment, with associated fluid loss and elevated body temperature, can lead to dehydration, heat exhaustion and heat stroke. Heat stroke is a potentially fatal condition and must be treated immediately by a medical professional.
- 1.3 To assist organisations and individuals when considering their duty of care responsibilities, Sports Medicine Australia – South Australia (SMA SA) has produced guidelines and a checklist for reference, which Softball Australia has used to develop these guidelines.
- 1.4 The guidelines are not binding. SMA SA and Softball Australia urge all parties to use common sense and to act responsibly when running an event.
- 1.5 Cancellation of games may be appropriate even in circumstances falling outside these guidelines.

### 2 Dehydration, heat exhaustion, heat stroke

#### Dehydration

- 2.1 Fluid loss occurs during exercise, mainly due to perspiration and respiration. It makes an athlete more susceptible to fatigue and muscle cramps. Inadequate fluid replacement before, during and after exercise will lead to excessive dehydration and may lead to heat exhaustion and heat stroke.

#### Heat exhaustion

- 2.2 Dehydration can lead to heat exhaustion, symptoms include:
  - Fatigue, high heart rate, light-headedness, dizziness, headache, loss of endurance and skills, confusion and nausea
  - Athletes will pass little urine, which will be highly concentrated
  - Cramps may be associated with dehydration.

#### Heat stroke

- 2.3 Severe dehydration may lead to heat stroke. Symptoms are similar to heat exhaustion with the addition of dry skin, confusion and collapse.
- 2.4 An athlete may suffer from heat stroke even though they have not been identified as suffering from heat exhaustion. Heat exhaustion and heat stroke can still occur even in the presence of good hydration.
- 2.5 Heat stroke is a potentially fatal condition and must be treated immediately by a medical professional.



### **3 Recommended preventative strategies**

#### **Hydration**

- Drink at least 500mls (2-3 glasses) before an activity.
- Drink 200mls (1-2 glasses) every 15 minutes during activity, preferably water however diluted cordial or sports drinks may be appropriate.
- Drink at least 500mls after an activity.

#### **Timing of games and training**

- Where possible, avoid scheduling training and matches during the hottest part of the day (usually between 11am and 3pm, or noon and 4pm during daylight saving time).
- Early morning or night games minimise the likelihood of unacceptable playing conditions.

#### **Player rest and rotation**

- Consider using substitutions more often during play.
- Ensure all dugouts are equipped with shade and fluids for appropriate rest, recovery and hydration when a team is batting.
- Team managers and coaches should be especially vigilant and monitor players' physical condition in extreme temperatures.

#### **Clothing**

3.1 It is essential that everyone is made aware of the importance of:

- Wearing appropriate clothing during play
- Wearing hats or visors whilst on the field
- Appropriate application and re-application of SPF 30+ sunscreen
- The use of wet towels
- Sunglasses.

#### **To summarise**

3.2 In extreme heat conditions:

- 3.2.1 The welfare of players and umpires is paramount
- 3.2.2 On days of extreme heat coaches, players, umpires and officials should be aware of the possible risks and carefully monitor all participants. If any show signs of heat distress, swift and appropriate action must be taken.
- 3.2.3 In softball, pitchers and catchers are most at risk.
- 3.2.4 Be aware that junior players are more susceptible to heat injury, especially those doubling up in senior competitions on the same day as their junior games
- 3.2.5 Teams playing back to back games or more than two games in a day may require more breaks.
- 3.2.6 Ensure there are sufficient shaded areas at grounds for both players and spectators



- 3.2.7 Ensure there are qualified first aiders at the ground
- 3.2.8 Consider cancelling or postponing scheduled games.
- 3.2.9 Associations and clubs should reserve the right to cancel all play when extreme temperatures are forecast. Local rules should include a time for notifying participants of the cancellation of the day's games.

The *Hot Weather Guidelines Checklist* below will assist in decision-making.

For further information, contact Softball Australia: [info@softball.org.au](mailto:info@softball.org.au)

The information in this guideline is of a general nature only and is not intended to be relied upon as, nor as a substitute for, specific professional advice. No responsibility for the loss occasioned to any person acting on or refraining from action as a result of any material in this guideline can be accepted.



## Softball Australia Hot Weather Checklist

This checklist will help you determine whether to commence or continue play in hot weather conditions. Allocate a score for each item – if in doubt err on the side of caution and apply a higher score. Some categories may not be applicable to your circumstance, in which case use your best judgment.

1	Wet bulb globe temperature <sup>1</sup> (or equivalent)	7	Time between available drinks	
	<18 degrees	12	Less than 15 minutes	2
	18 to 22 degrees	10	15 to 25 minutes	4
	23 to 28 degrees	14	25 to 35 minutes	6
	Above 28 degrees	20	35 to 45 minutes	8
			45 minutes plus	10
2	Overall duration of event	8	Time of the event	
	Less than 30 minutes	2	Before 9am	2
	30 to 60 minutes	4	After dark	2
	60 minutes to 2 hours	6	9am till 11am	5
	Greater than 2 hours	8	3pm till sunset	5
			11am to 3pm	10
3	Individual intensity during the event	9	Surface type	
	Easy pace throughout	2	Water	1
	Moderate pace, breaks in intensity	4	Grass	2
	Moderate pace throughout	6	Boards	4
	Sustained effort with some breaks	8	Sand	6
	Sustained effort throughout	10	Synthetic surface	6
			Asphalt	8
4	Acclimatisation of participants	10	Venue	
	Used to hot weather conditions	2	Indoor air conditioning	1
	Used to warm weather conditions	5	Indoor no air conditioning	4
	Used to cool/cold conditions	8	Outdoor	8
5	Athletic ability of individuals	11	Other predisposed medical conditions of participants	
	Elite fitness levels	2	No	0
	Good fitness level	6	Yes	6
	Moderate fitness levels	6		
	Low fitness levels	8		
6	Age of participants	12	Other factors to consider	
	18 to 30	2	Shade available during breaks	Yes/No
	13 to 17	5	Water freely available at venue	Yes/No
	30 to 40	5	Sports trainer/first aid person on site	Yes/No
	Over 40	8	Body fat of individual participants	High/Low
	Under 13	8		

<sup>1</sup> To obtain the Wet Bulb Globe Temperature or equivalent, required to complete the checklist, please refer to your State or Territory [Bureau of Meteorology](#).



## Recommended Guidelines

### Point Score

Above 75	Softball Australia and SMA SA recommend you take appropriate preventative strategies to ensure the welfare of players, coaches and officials
66 to 74	<p>Softball Australia and SMA SA recommend you take appropriate preventative strategies to ensure the welfare of players, coaches and officials if:</p> <ul style="list-style-type: none"><li>• The Wet Bulb Globe Temp (or equivalent) is above 28 or</li><li>• The age of the participants gets a point value of 8</li><li>• If this is not the case and the event goes on, then:<ul style="list-style-type: none"><li>• Extra drink breaks should be allowed</li><li>• Shade should be provided</li><li>• Promotion of fluid replacement should be actively encouraged by coaches, umpires and PA announcements</li></ul></li></ul>
56 to 65	<p>Softball Australia and SMA SA recommend play may go ahead BUT</p> <ul style="list-style-type: none"><li>• Extra drink breaks should be allowed</li><li>• Shade should be provided</li><li>• Promotion of fluid replacement should be actively encouraged by coaches, umpires and public announcements</li></ul>
55 and below	Softball Australia and SMA SA recommend play with usual fluid replacement measures in place

Softball Australia and SMA SA reminds sporting groups and individuals that:

- Cancellation of events or withdrawal from participation may be appropriate even in circumstances falling outside of these recommendations.
- Individuals can use the guidelines and point scores to ascertain whether they should be involved in a particular event.



## Recommended Breaks

- 1 The Softball Australia Hot Weather Guidelines contain the criteria for invoking the heat policy, the Local Bureau of Meteorology or a Bulb Meter will be used for wet bulb/humidity readings.
- 2 Dependant on the Hot Weather Guidelines and points risk range, five-minute breaks should be implemented.
- 3 Teams playing back to back games or a third game for the day may need to take more mandatory breaks.
- 4 Teams that have spent a longer time than usual in the field may request to the plate umpire to take a longer break in the innings change over to hydrate.
- 5 Time may also be requested by a team to supply water to any player.
- 6 Team Management should bring this or any other concern in regard to heat effects on participants to the attention of the plate umpire and game management.

**Note:** In all cases when the heat policy is invoked it is mandatory to take the five-minute break.

## For Australian Championships

- 1 Teams will be advised by the Tournament Chief Umpire (TCU) when breaks will be taken, these may be at the completion of five innings if considered mid-range or 3<sup>rd</sup> and 5<sup>th</sup> innings in higher risk categories.
- 2 In tie breakers it will be at the completion of seven innings and every two innings after.
- 3 In U14 Regional Championships the heat policy break of five minutes will be taken after 40 minutes play regardless of the innings timing. The umpires should use their discretion if a half innings or completed innings is close to take the break then, even if this is before 40 minutes.
- 4 In high risk range the TCU may direct an earlier break.
- 5 In timed games, no additional time will be added to game times played under the Hot Weather Guidelines.

## Sports Medicine Australia (SMA) 'Beat the Heat' Fact Sheet

Sourced from the SMA website: <https://sma.org.au/resources-advice/policies-and-guidelines/hot-weather/>



### » 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.



## 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)).

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## Softball Australia Lightning Strikes Guidelines

### 1 Introduction

- 1.1 In statistical terms, lightning poses a greater threat to individuals than almost any other natural hazard in Australia, accounting for five to ten lives and well over 100 injuries annually. These figures are likely to increase in line with the growing proportion of people who are engaging in outdoor recreational activities.
- 1.2 Lightning can cause injuries or death in several ways, including:
- Direct strike – when a person is directly struck by lightning;
  - Contact voltage – when a person is in direct contact with a conductor that has been struck by lightning, either inside or outside a structure, or dugout;
  - Side flash – when a person is struck by an arc or flash from a conductor carrying a lightning strike near the person; and
  - Ground current – injuries can occur when standing in the area of a lightning strike as the current can flow through the ground and enter and exit the body through the feet.

Lightning can also travel long distances in electrical conducting materials such as metal wires, fences, pipes, plumbing or other metal surfaces. Metal does not attract lightning, but it provides a path for the lightning to follow. Whether inside or outside, contact with metal wires, electrical appliances, pipes, plumbing, landline telephones, windows and doors should be avoided.

### 2 Overview

- 2.1 The observation of approaching storm clouds from the first flash of lightning or clap of thunder, no matter how far away, should heighten lightning awareness. The level of risk depends on one's location (direction and distance) relative to the storm cell and the direction in which the storm system is traveling.
- 2.2 A simple method of determining the distance to the storm cell is to measure the time elapsed from when the lightning flash is observed and when the associated clap of thunder is heard.
- 2.3 Light travels faster than sound. If the light from the flash reaches the observer instantaneously, and knowing that sound takes approximately three seconds to travel one kilometre, the distance can be determined by using the following rule:
- Distance (in Km) = Time from observing the flash to hearing thunder (in three seconds)
- 2.4 It is important to remember that lightning may be obscured by clouds so it must be assumed that when thunder is heard, lightning is in the vicinity. In such cases, careful judgment must be used to determine whether a threat exists.

### 3 Procedure

#### Access to Bureau of Meteorology

- 3.1 An official monitor should be assigned to monitor and advise on the weather, especially the possibility of thunderstorms. Local knowledge would be considered preferable.
- 3.2 In the lead up to the game, it is recommended that a designated official monitor weather forecasts on the Bureau of Meteorology (BOM) website ( [bom.gov.au/](http://bom.gov.au/)). This can assist with the direction of the storm and warnings.
- 3.3 If the weather patterns show a storm is imminent a decision to start or not start should be considered by the Tournament Management Committee in consultation with the designated official weather monitor.
- 3.4 After a game has started the 30/30 rule is recommended along with monitoring of the BOM website.
- 3.5 If access to BOM is not available on the day, the 30/30 rule is recommended.
- 3.6 The first part of the 30/30 rules is a guide to the **postponement** or **suspension** of games. During a thunderstorm, a 'flash-to-bang' count of 30 seconds indicates that the lightning is 10km away (1km per three seconds) and the chances of being struck by lightning is high. This indicates a potential for significant risk and the plate umpire should suspend the game.
- 3.7 The second part of the 30/30 rule provides a guide to the **resumption** of games. It is recommended that a period of 30 minutes should elapse after the last sight of lightning or the sound of thunder before resuming the game.

**Note:** blue sky and lack of rainfall is not a reason to breach the 30 minute return-to-activity rule. 'Australia Wide First Aid' encourages you to find solid shelter during a storm. This does not include a tree or a dugout. Try and find shelter within a building, bus shelter or car and avoid water and objects that conduct electricity. Substantial buildings with wiring and plumbing to dissipate the charge provides the greatest amount of protection.

If you're unable to find safe shelter, crouch down in the open, feet together with your head tucked down towards your chest. You should aim to make yourself as small as you can. Laying down flat on the ground increases your total body surface area, which also increases your chance of getting struck by lightning. You should wait approximately 30 minutes after the last flash of lightning before you leave your shelter. More than half of lightning deaths occur once the storm has passed.

#### Unsafe locations and situations

- 3.8 Avoid:
  - 3.8.1 Open field
  - 3.8.2 Close vicinity to the tallest structure (e.g., tree, light pole)
  - 3.8.3 Small structures (e.g., rain/picnic shelters, tents, lightweight dugouts)
  - 3.8.4 Umbrellas, bats or other objects that increase an individual's height
- 3.9 Avoid the use of portable radios, mobile and landline telephones, fax machines, computers and other electrical equipment. If emergency calls are required, keep them brief.



## **4 Game responsibilities**

- 4.1 The plate umpire is responsible for suspending games, The Tournament Chief Umpire /Tournament Management Committee (TMC) may also suspend games.
- 4.2 Once a game is suspended, the plate umpire hands responsibility to the TMC. The TMC consists of:
- Tournament Chief Umpire
  - Softball Australia Technical Delegate
  - Tournament Convenor
  - Tournament Chief Statistician
- 4.3 The TMC must ensure all participants convene to a safe area (e.g., club house, 'hard top' vehicle etc.).
- 4.4 The TMC is responsible for notifying all team managers of the situation.
- 4.5 Team managers are responsible for notifying their own team personnel of the situation.
- 4.6 The TMC is responsible at all times for keeping team managers informed.
- 4.7 The TMC is responsible for deciding if and when the game will resume and will not do so unless 30 minutes has elapsed after the last sight of lightning or sound of thunder.
- 4.8 The Weather Monitor should also be consulted if not on the TMC.
- 4.9 Once the game resumes, the Tournament Chief Umpire will hand over responsibility to the Plate Umpire for the game to recommence.

## **5 First aid**

- 5.1 If some is struck by lightning, get medical attention as quickly as possible.
- 5.2 Ensure the rescuer is in no danger of being struck by lightning. If the patient is not breathing commence resuscitation immediately.
- 5.3 Check for burns in two places – the injured person may be burned, both where they were struck and where the electricity left their body. Being struck by lightning can also cause nervous system damage, broken bones, and loss of hearing or eyesight.
- 5.4 Be aware that *the victim will not retain an electrical charge, so it is safe to touch them.*

## **6 References**

- BOM website: <http://www.bom.gov.au/weather-services/severe-weather-knowledge-centre/safety.shtml>
- [www.australiawidefirstaid.com.au/lightning-strikes](http://www.australiawidefirstaid.com.au/lightning-strikes)
- AFL extreme weather policy 2017. <https://aflvic.com.au/wp-content/uploads/2018/02/AFL-Victoria-Extreme-Weather-Policy.pdf>
- WBSC Umpire Manual
- Australian Lightning Standards AS/NZS 1768-2007