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| <b>NAME OF DOCUMENT</b>    | Baseball NSW Heat Policy-Management of Extreme Hot Weather Conditions  |
| <b>TYPE OF DOCUMENT</b>    | Policy   |
| <b>DOCUMENT NUMBER</b>     | 06   |
| <b>DATE OF PUBLICATION</b> | 16 May 2017  |
| <b>RISK RATING</b>         | High   |
| <b>LEVEL OF EVIDENCE</b>   | Ambient temperature equal to or greater than 32 degrees Celsius for children and 37 degrees Celsius for adults. Ambient temperature and dew point readings can be obtained from the Bureau of Meteorology.     |
| <b>REVIEW DATE</b>         | Yearly   |
| <b>FORMER REFERENCE(S)</b> | N/A  |
| <b>EXECUTIVE SPONSOR</b>   | Baseball NSW Board of Directors  |
| <b>AUTHOR</b>              | Therese Philibossian<br>Director Baseball NSW  |
| <b>KEY TERMS</b>           | Ambient temperature measures recorded readings (temperature) and includes dry and humid conditions<br><br>Sports Medicine Australia (SMA)<br><br>A child refers to any person aged up to 16 years of age.      |
| <b>SUMMARY</b>             | The term 'heat policy' refers to the process for the management of extreme hot weather situations/events and outlines the method of contact by the Competition Secretary BNSW to all Associations and Leagues. |

**1. POLICY STATEMENT**

The heat policy refers to the management of extreme hot weather situations/events for junior and adult players. The policy will outline the process to be enacted when conditions are such that play is ceased or games are not conducted to protect players from potential heat associated conditions. BNSW will make the final determination regarding the conduct of training, games, selection trials and other events. This will be communicated to the Associations, Men and Women's State League to inform relevant parties regarding the opportunity to play scheduled games, training, trials or other events when weather conditions inhibit or prevent play. This policy is enacted to prevent the risk of heat illness by junior and adult players.

A junior player is a person aged up to and including 16 years of age. Children are particularly susceptible to extremes of heat and should not be forced to play or continue to play or train in these conditions. If a child complains about feeling unwell or is distressed during play or training they are to be supported to cease playing or training.

**2. MANAGEMENT OF PLAYERS, OFFICIALS AND VOLUNTEERS DURING EXTREME HOT WEATHER**

During the summer months and 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 (SMA) Beat the Heat Fact sheet is to be provided at the commencement of the season to players, parents and team officials. Promote and encourage players and officials to regularly apply sun screen, preferably water soluble.

Weather conditions and forecasts should be monitored the day before games and scheduled training. Closely monitor local weather conditions to enable changes in training or the rescheduling of games. During periods of potential high temperatures games and training should be rescheduled to the cooler times of the day and evening.

All players, officials and volunteers are encouraged to ingest regular oral fluids during games and training sessions. Schedule regular breaks during training and games to enable players and officials to rest in the shade and encourage snacks if applicable.

**3. CONDITIONS OF HEAT**

Ambient temperature conditions need to take into account if the weather conditions are humid or dry. Ambient conditions on hot, dry days can be identified in the table below. This table provides the level of risk and the guidelines to manage activity in order to minimise heat stress.

**Table 1 Ambient Temperature for use on hot, dry days**

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

(Sports Medicine Australia, Beat the Heat Fact Sheet, 2011)

With increases in air temperature and humidity, heat stress can be more marked. It is recommended that the Wet Bulb Globe Temperature (WBGT) index is used. This index is useful when humidity is high. 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)). Table 2 refers to the Wet Globe Temperature to determine the relative humidity and the risk of heat illness by players.

**Table 2 Wet Globe Temperature for use when humidity is high**

| Wet Bulb Globe Temperature | Relative humidity | Risk of heat illness | Recommended Management of Sports Activities   |
|----------------------------|-------------------|----------------------|---|
| Less than 20               | Low               | Low                  | Heat illness can occur in distance running<br>Caution over-motivation                                   |
| 21 - 25                    | Moderate - high   | Low - moderate       | Increase vigilance<br>Caution over-motivation<br>Moderate early pre-season training<br>Take more breaks |
| 26 - 29                    | High - very high  | Moderate - high      | Limit intensity, take more breaks<br>Limit duration to less than 60 minutes per session                 |
| 30 and above               | Extreme           | High - very high     | Consider postponement to a cooler part of the day or cancellation                                       |

(Sports Medicine Australia, Beat the Heat Fact Sheet, 2011)

**2.1 Children and Adolescents**

Children are more predisposed to risk of heat illness than adults. As such, it is recommended by Sports Medicine Australia that at an ambient temperature greater than or equal to 32 degrees Celsius poses a significant risk of thermal injury to children and adolescents. There may be instances where the recommended ambient temperature is lower than 32 degrees Celsius due to humid conditions. To safeguard children and adolescents a decision may be made for the cessation of training, games, selection trials or other events when the ambient temperature is below 32 degrees Celsius and the relative humidity is high.

**2.2 Adults**

Ambient temperatures equal to or greater than 37 degrees Celsius are considered to pose a thermal risk for adults. There may also be weather conditions where humidity is high and the associated risk for potential effects of heat stress and illness increases. In these events, a decision is to be made regarding the cessation of training, game, selection trails or other events.

**4. SYMPTOMS OF HEAT STRESS AND 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/clumsiness or unsteadiness
- Confusion
- Aggressive or irrational behaviour
- Altered consciousness
- Collapse
- Ashen grey pale skin

### **3. MANAGEMENT OF AN EPISODE OF HEAT STRESS**

- In the events 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 or area to a cool place.
- If possible, lay the player, official or volunteer in a cool place whilst raising their legs to improve circulation and blood pressure.
- Remove any excess clothes. For example, catcher would include helmet and protective padding.
- To promote cooling wet the skin and fan. Apply a cool wet washer to the back of the neck and if ice packs are available place in groin, armpits and the neck also. Encourage oral fluids particularly water.
- Stay with the player, official or volunteer to monitor progress. There should be an improvement in their condition.
- In the event that the player, official or volunteer does not improve following this first aid and there is vomiting, confusion or altered consciousness then an ambulance is to be called immediately.
- Continue cooling measures until the ambulance arrives.
- The monitoring of the affected person's temperature either orally or per axilla is not a reliable indicator of true body temperature. The rectal temperature is the most accurate measure however, can only be recorded by a nurse or doctor.

### **4. CANCELLATION OF TRAINING, GAMES, SELECTION TRIALS OR OTHER EVENTS**

It is recommended that games, training, selection trials or other events are cancelled or postponed when:

- The ambient temperature is 32 degrees Celsius for children and adolescents

- The ambient temperature is 37 degrees Celsius for adults
- Cancellation of games, training, selection trials or other events at lower temperatures may be necessary and is dependent upon humidity (as per Table 2), local conditions including radiant heat from synthetic surfaces, ventilation in indoor facilities, player wellbeing and acclimatisation.
- Heat stress increases with increases in air temperature but be aware that there are not clear demarcations in risk between temperature ranges.

## 5. EXTREME HOT WEATHER CONDITIONS COMMUNICATION PROCESS

The Competition Secretary of BNSW will communicate with each Association Secretary and advise them of the cancellation of the round. Where this round has been cancelled due to extreme hot weather conditions, this will be treated as a 'wash out' round.

Associations will need to contact the Competition Secretary BNSW and confirm that they have enacted the above communication. This also includes the Umpires Association and Scorers.

## 6. REFERENCES

Bureau of Meteorology ([www.bom.gov.au](http://www.bom.gov.au)) website for:

- Sports Medicine Australia Hot Weather Guidelines
- Sports Medicine Australia Beat the Heat Fact Sheet, 2011
- Heat Stress Index
- Sports Medicine Australia UV Exposure & Heat Illness Guide
- Sun Smart Resources

## 7. REVISION AND APPROVAL HISTORY

| Date                             | Revision No. | Author and Approval                                |
|----------------------------------|--------------|--|
| 16 May 2017<br>26 September 2017 | 0            | Therese Philibossian<br>Ratified by the Board BNSW |