

QRL Heat Guidelines - 2017

Introduction

The health of those participating in rugby league is of primary concern for the Queensland Rugby League and its affiliated organisations. The guidelines are designed to protect players and officials from injury and illness that may result by playing Rugby League in extreme weather conditions. These guidelines recognise that all players can be at risk although children can be at greater risk in some instances, especially heat stress. To assist such organisations, Sports Medicine Australia – South Australia (SMA SA) has produced the following sets of documents to act as a guide in the development of a heat policy.

- ***Hot Weather Guidelines***
- ***Beat the Heat Fact Sheet***
- ***UV Exposure and Heat Illness Guide***

The guidelines are not binding but the SMA SA and the QRL reminds all parties that they must act responsibly. We encourage a common-sense approach and consideration of the comfort and well-being of all individuals including participants and officials. Cancellation or modification of games and/or training may be appropriate even in circumstances falling outside these guidelines.

Ground Managers and First Aid Officers (FAO) have a duty of care to players and officials to regularly monitor environmental and playing conditions and to take action to minimise the risk of heat stress.

These guidelines have been developed under the following headings:

1. QRL Abeyance Period
2. Guidelines Aims
3. Wet Bulb Temperature (WBT) Calculator
4. Decision Making Process
5. Appendices

Part 1 QRL Abeyance Period

It is important to note that the QRL has an Abeyance Period for rugby league matches, trials and carnivals involving any Body which is affiliated with the QRL. The Period will commence on the third weekend of October and finish after the second weekend of January inclusive. It is stressed that if a QRL Affiliated Body or its players participate in a Rugby League event as outlined during the Abeyance Period it not only breaches QRL Policy but will also **NOT** be covered under the QRL Insurance Policy. Certain events may be permitted under 'Special Circumstances' during the Abeyance Period. These events however will need to be sanctioned by a panel appointed by the QRL Board. Refer to QRL Abeyance Circular 291.

Part 2 Guideline Aims

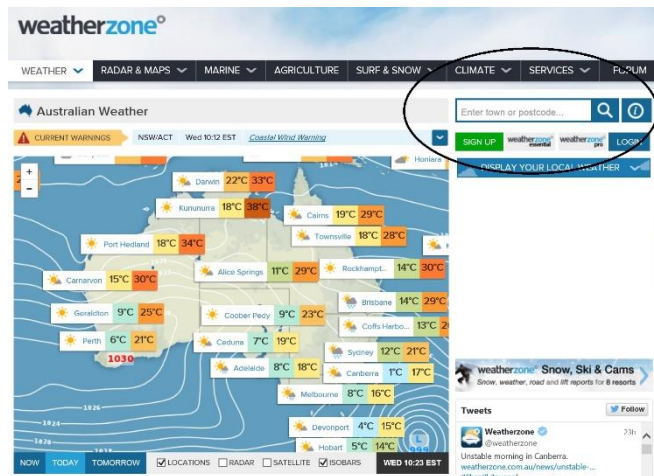
- To protect the health, safety and wellbeing of all who participate in a QRL sanctioned event;
- To ensure that venues are a safe place to play, spectate and officiate as far as is reasonably practical;
- Provide guidance for the effective management of extreme weather conditions.

Part 3 Wet Bulb Temperature (WBT) Calculator

Step 1:

Go to the weatherzone website <http://www.weatherzone.com.au/> and enter your town or postcode in the search box to find the following information:

- Temperature
- Relative Humidity
- Pressure



Temperature

CURRENTLY AT LONGREACH		SUN ON WED	
Temperature	28.7°C	Sunrise	06:19 EST
Dew Point	8.3°C	Sunset	18:17 EST
Feels Like	27.5°C		
Relative Humidity	27%		
Wind	N 25km/h		
Wind Gusts	30km/h		
Pressure	1018.6hPa		
Fire Danger	23.6		
Rain since 9am/last hr	0.0mm / -		

Relative Humidity

CURRENTLY AT LONGREACH		SUN ON WED	
Temperature	28.7°C	Sunrise	06:19 EST
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Pressure

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Rain since 9am/last hr	0.0mm / -		

Step 2:

Enter the three measures found in Step 1 into the Wet Bulb Calculator, <https://www.easycalculation.com/weather/dewpoint-wetbulb-calculator.php> making sure you select Celsius for Temperature in the first row and millibars (hPA) for actual station pressure in the third row.

Temperature

Calculation of Dewpoint and Wet-bulb Temperature from Relative Humidity - Weather Calculator

Temperature (T) Fahrenheit Celsius Kelvin

Relative Humidity (rh) %

Actual station pressure (P_{sta}) in of Hg mm of Hg millibars (hPA)

Compute **Clear**

Wet-bulb (T _w)	Dewpoint (T _d)	Unit
<input type="text"/>	<input type="text"/>	Fahrenheit
<input type="text"/>	<input type="text"/>	Celsius
<input type="text"/>	<input type="text"/>	Kelvin

Relative Humidity

Calculation of Dewpoint and Wet-bulb Temperature from Relative Humidity - Weather Calculator

Temperature (T) Fahrenheit Celsius Kelvin

Relative Humidity (rh) %

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Compute **Clear**

Wet-bulb (T _w)	Dewpoint (T _d)	Unit
<input type="text"/>	<input type="text"/>	Fahrenheit
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Pressure

Calculation of Dewpoint and Wet-bulb Temperature from Relative Humidity - Weather Calculator

Temperature (T) Fahrenheit Celsius Kelvin

Relative Humidity (rh) %

Actual station pressure (P_{sta}) in of Hg mm of Hg millibars (hPA)

Compute **Clear**

Wet-bulb (T _w)	Dewpoint (T _d)	Unit
<input type="text"/>	<input type="text"/>	Fahrenheit
<input type="text"/>	<input type="text"/>	Celsius
<input type="text"/>	<input type="text"/>	Kelvin

Step 3:

Press the compute button in order to read the results. The Wet Bulb Temperature (Celsius) is in the second row of the table.

Calculation of Dewpoint and Wet-bulb Temperature from Relative Humidity - Weather Calculator

Temperature (T) Fahrenheit Celsius Kelvin

Relative Humidity (rh) %

Actual station pressure (P_{sta}) in of Hg mm of Hg millibars (hPA)

Compute **Clear**

Wet-bulb (T _w)	Dewpoint (T _d)	Unit
<input type="text"/>	<input type="text"/>	Fahrenheit
<input type="text"/>	<input type="text"/>	Celsius
<input type="text"/>	<input type="text"/>	Kelvin

Part 4 Decision Process

Once the wet bulb reading calculation has been completed and the reading suggests modification to playing conditions is required, the following process must be followed:

1. Ground Manager/ appointed club representative informs both coaches of the wet bulb reading and the need to take appropriate action.
2. Ground Manager/ appointed club representative notifies the appointed match officials with confirmation of the wet bulb reading including presenting suggested changes as per the guidelines.
3. Match Officials (including Coach Match Official) make final decision on appropriate changes to match conditions.
4. Ground Manager/ appointed club representatives informs both coaches of the decision made.
5. Ground Manager/ appointed club representatives must notify the relevant administration unit in writing of any changes made to match conditions.

Part 5 Appendices

How do you tell if someone has heat illness?

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.

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 signs or symptoms, they should stop immediately.

- 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.

Recommended Preventative Strategies

1. 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.

2. Timing of Games and Training

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

3. Player Rest and Rotation

- Consider using substitutions more often during play.
- Ensure all substitutes are positioned under appropriate shade and have access to fluids for appropriate rest, recovery and hydration.
- Team coaches and FAO should be especially vigilant and monitor players' physical condition in extreme temperatures.

4. Clothing / Protection

- Wear appropriate clothing during play.
- Wear hats or visors whilst training.
- Appropriate application and re-application of SPF 30+ sunscreen.
- The use of wet towels.

Recommended Adjustments

The following table is to be used as a guide by QRL employees, League Chairs and QRL appointed Ground Managers in determining whether training or matches should continue as scheduled or if they need to be modified, postponed or cancelled. If either the wet bulb temperature or ambient temperature is within a certain range, then you must follow the recommended possible management for sustained physical activity.

Wet Bulb Temperature	Ambient Temperature	Risk of Thermal Injury	Possible management for sustained physical activity.
< 20	< 25	Low	<ul style="list-style-type: none">• Heat illness can occur in distance running.
21 – 25	26 – 30	Moderate to High	<ul style="list-style-type: none">• Moderate early pre – season training.• Reduce intensity and duration of play / training.• Take more breaks.
26 – 29	31 – 35	High to very high	<ul style="list-style-type: none">• Limit intensity, take more breaks.• Limit duration to less than 60 minutes.
> 30	> 36	Extreme	<ul style="list-style-type: none">• Postpone to a cooler part of the day or cancel event.

			• Swimming is allowed.
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In the event that a match or carnival is played in conditions where a modification is required, the following are possible suggestions to allow play to continue:

- A match could consist of four (4) periods of play of lesser length rather than the standard two (2).
- The length of each playing period could be decreased.
- Increase the number of interchanges or allow unlimited interchanges.
- Include a drink break at a point approximately half way through each of the two periods of play.
- Allow the players access to shade during the half time break.
- Increase the number of runners during the match who can provide the players with water.
- Provide ice baths in order to decrease body temperature.
- Airflow should be considered, including fans in change rooms or placed appropriately.

All teams and individuals should note that cancellation of events or withdrawal from participation may be appropriate even in circumstances falling outside of these recommendations.