



# **HOT & EXTREME WEATHER GUIDELINES FOR AUSTRALIAN RANCH HORSE EVENTS AND ACTIVITIES**

## **1 Introduction**

The following guidelines are provided to help ARH Approved Shows manage the risks associated with the conduct of equestrian events in hot weather. All show organisers are required to abide by the guidelines and must act responsibly.

The ARH is dedicated to animal welfare and encourages a common-sense approach with the comfort and well-being of all individuals and the welfare of horses participating at the event being paramount.

There are many factors to be considered when Approved Shows are contemplating modifying, postponing or cancelling events or activities and being aware of the difficulty of setting 'one size fits all' guidelines in this area.

The dangers of heat illness are likely to arise from high intensity or prolonged activities conducted in hot and/or humid conditions. Most activities can be managed to ensure that participants and horses are not required to perform high intensity activities for a period long enough to cause harm, however extra precautions will need to be taken to manage risks where activities are of a high intensity or where participants are liable to push themselves or their horses beyond their normal boundaries of activity; an example being excessive lunging or practice causing signs of distress in the horse.

**2** When weather conditions have the potential to affect the health and safety of participants and/or welfare of horses at ARH events and activities, organisers are expected to take steps to reduce the risk of illness or injury. Decisions by a Show Organiser to cancel or modify an event where it can be shown that extreme weather conditions constituted a risk to health and safety will be supported by the ARH. Judges have the authority to modify an event where it can be shown that extreme weather conditions constitute a risk to health and safety of animals and people.

**3** It is expected that organisers will observe all Extreme Weather alerts including alerts of storms, extreme winds, and extreme fire danger and will not knowingly bring competitors into danger. Travel bans issued by appropriate authorities in the case of fire or flood must also be observed.

**4** Factors to be considered before cancelling or modifying an event or activity include:

- Environmental factors: temperature, extreme weather conditions
- Duration and intensity of an event: type of activity – is it low, medium or high intensity.
- Duration of the activity
- Format of competition/activity: opportunities for rest and hydration breaks
- Time of day: possibility of rescheduling to cooler parts of day
- Local environment: radiant heat from sand arenas, indoor facilities, availability of shade
- Availability of vet or doctor



The Activity Modification Chart shown below provide estimates of risk related to weather and also guidelines to managing activity in order to minimise the effects of heat. Temperature should be based on the forecast (pre event) or actual (at event) issued by the Bureau of Meteorology or by onsite measurements.

The Elders weather information site provides comprehensive and easy to follow weather forecasts using BOM data. Go to [www.eldersweather.com.au](http://www.eldersweather.com.au)

Ambient Temp	Relative Humidity	Risk of heat Illness	Suggested Event modification
26 – 30	>60%	Moderate	<p><b>Low – med intensity activity</b></p> <ul style="list-style-type: none"> <li>• Provide regular relief for officials.</li> <li>• Ensure adequate water supplies for horses and people.</li> <li>• Ensure adequate shade for officials.</li> <li>• Competitors to make use of shade and take regular breaks.</li> </ul>
31 – 35	>50%	High -Very High	<p><b>Low – med intensity activity</b></p> <ul style="list-style-type: none"> <li>• Shorten warm-ups.</li> <li>• Resting horses’ access to shade</li> </ul> <p><b>High intensity activity</b></p> <ul style="list-style-type: none"> <li>• Access to vet/first aid/hospital care to be readily available.</li> <li>• Monitor all areas for signs of distressed horses. Provide aggressive cooling facilities ie: water and ice.</li> </ul>
36 +	>30%	Extreme	<p><b>Low – Med intensity activity</b></p> <ul style="list-style-type: none"> <li>• Reschedule to avoid hottest part of day.</li> <li>• Monitor cool down area for appropriate care.</li> </ul> <p><b>High intensity activity</b></p> <ul style="list-style-type: none"> <li>• Consider postponing/cancelling event.</li> <li>• Avoid *At relative humidity levels above those indicated on the table, risk of heat stress increases markedly.</li> <li>• Provide vet on site.</li> </ul>

## 5 FORECASTS & NOTICE

Where forecasts indicate that an event may be impacted by extreme weather, Approved Shows should consider initiating arrangements to cancel or modify an event where possible, between 72 and 48 hours prior.



All reasonable steps should be taken to notify competitors and officials of the changes. Revised arrangements are to be advertised on the ARH Facebook page and it is recommended an email and/or text message is sent to all competitors and officials.

Where sudden changes to the weather forecast necessitate cancellation or modification of the event less than 48-hour prior, organisers are required to take reasonable steps to advertise the revised arrangements and notify participants in person via email or FB.

Where the option to enter on the day is offered, event programs changes should be announced, and pro-active management taken to inform all people by text or in person.

## **6. SIGNS AND MANAGEMENT OF HEAT RELATED ILLNESS**

Competitors and official participants have responsibility for managing their personal situation and the following should be noted to reduce the chance of heat stress during exercise:

- Fitness – normally active healthy people are best able to cope with hot weather activity
- Avoid the hottest part of the day
- Clothing – light-coloured and comfortable clothes made from natural fibres.
- Fluids – drink at least half a litre of fluids in the two hours before exercising. Aim to replenish fluids every 20 minutes or so.
- Alcohol – alcohol dehydrates the body, so avoid drinking any alcohol for at least one day prior to the activity
- Rest breaks – frequent breaks in the shade allow the body to cool down.
- Check for symptoms – be alert for the symptoms of heat stress or dehydration.

### **Signs of heat exhaustion**

- High heart rate, dizziness, headache, loss of endurance/skill, confusion, nausea
- The skin may still be cool/sweating but the person will be pale
- High temperature and collapse on stopping activity

### **Managing heat exhaustion**

- If feeling unwell, immediately cease activity and rest in shade with some passing breeze (fan if necessary)
- Take extra water
- Misting or spraying water on person can help

### **Signs of heat stroke**

- As per heat exhaustion but with dry skin, confusion and collapse
- High core temperature.

### **Managing heat stroke**

This is a potentially fatal condition and must be treated immediately. Refer to a medical professional. It should be assumed that any collapsed rider is at danger of heat stroke. The best first aid procedure is to strip/soak/fan.



- Strip off excess clothing
- Soak in water
- Fan
- Ice placed in groin and armpits is also helpful.

### **7. Horses A general outline by Kirsten Neil BVSc (Hons)**

Provisions need to be made by event organisers for competitions conducted under extreme weather conditions. In Australia, such extreme conditions usually occur over summer associated with high environmental temperatures and/or humidity.

At most competitions, implementation of the changes suggested below will enable horses to continue competing safely. However, there will be situations when cancellation of the event will be in the best interest of both horses and competitors. The responsibility for the horses' welfare does not fall solely on event organisers though, the primary responsibility for the horse's welfare lies with the rider. It is the rider's responsibility to ensure that the horse is fit for the competition entered, to provide adequate water and electrolytes and to aggressively cool the horse after exercise.

Sweating is the principal means of thermoregulation in the exercising horse. Heat is lost via evaporation of sweat from the skin surface. Under hot and humid conditions, sweat cannot evaporate efficiently or completely, especially under conditions of high humidity. The exercise capacity of un-acclimated, unfit horses is markedly reduced under such environmental conditions. Horses are at risk of developing heat stress and heat exhaustion, the consequences of which can be catastrophic if not treated early and aggressively.

#### **Signs of heat exhaustion in the horse**

Signs may include:

- Profound depression, distress or agitation eg violently kicking out
- Persistently elevated rectal temperature, heart rate and respiratory rate
- Cardiac irregularities
- Marked dehydration with lack of thirst
- Muscle cramps, rhabdomyolysis (tying up)
- Weakness, ataxia, collapse and death

#### **General recommendations pertaining to exercising of horses under hot and humid conditions:**

- Adequate provision of water and ice for cooling. There needs to be adequate hoses and water supply for cooling. The most efficient means of cooling is sponging water onto the body and immediately scraping off water and repeating. Simply continually hosing a horse with water without scraping the water off will not aid evaporation and cooling. Event organisers need to decide and publicise prior to competition how Competitors will be able to access ice for cooling. Event organisers should however have ice available on site for rapid cooling of distressed horses, and cold water hosing should be preferentially available for the worst affected horses. As a guideline, up to 10 bags of ice per horse may be required.
- **Stage events during the coolest part of the day i.e. the morning**



- Provide areas for cooling after competition in the shade, especially after strenuous class.
- Air flow is important and greatly aids evaporation and cooling (this is why horses are gently walked while being cooled unless they are distressed). Horses should be exercised and cooled in well ventilated areas. If there is no wind on competition day, fans and in particular misting fans may be used in shaded areas to assist cooling.
- Surface for warm up and competition is important. If possible, arenas should be on grass in shaded areas. Sand arenas and asphalt produce and retain more radiant heat than other surfaces.
- Veterinary attendance should be strongly considered for other competition types under extreme conditions. At a minimum, contact the local veterinarian prior to the event and make provisions for quick veterinary attendance.
- The veterinarian, a member of the ground jury or a member of the organising committee should take responsibility for monitoring horses at the competition to ensure that aggressive cooling measures are undertaken.

**Rider recommendations:**

- All horses competing under hot and humid conditions should be supplemented with electrolytes
- Ensure your horse is fit for the event in which it is entered. If your horse is overweight and unfit, don't take it!
- Reduce the duration of warm up. The longer the horse is worked for, the more likely it will become heat stressed. Show horses usually have a higher body mass both due to greater muscling and weight, and are therefore less efficient at dissipating heat.
- Don't rug your horse even with a cotton rug immediately after exercise. A horse's temperature will continue to be elevated 10-30 minutes post exercise.

The article "A general outline" published by Kirsten Neil BVSc (Hons). Show organisers and competitors should consult their veterinarian for specific advice for their animals.