

**HORSE RIDING CLUBS ASSOCIATION of VICTORIA****SIGNS AND MANAGEMENT OF HEAT RELATED ILLNESS****Riders and officials**

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
- **Acclimatisation** – keep up an exercise program during the cooler months
- **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.

**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 riders. 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 unacclimated, 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 riders 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 cross country.
- 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.
- Reduce the number of jumping efforts, shorten cross country course and avoid hills in the latter part of the course.
- 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 at one day events is mandatory, and 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. This pertains in particular to dressage and showing competitors, not simply eventers. Dressage and 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.

**Information on Thermal Stress**

[http://www.bom.gov.au/info/thermal\\_stress/](http://www.bom.gov.au/info/thermal_stress/)

<http://sma.org.au/resources/policies/hot-weather/>