

RACING HORSES IN HOT WEATHER

Heat stress is occasionally seen after racing horses in hot weather. In general most horses easily adjust to conditions of high heat and humidity. In conjunction, thoroughbred and harness races are conducted over relatively short distances, so maximal exertion in the heat only occurs for a short period. The amount of heat generated and body water lost is minimal compared to other endurance horse sports.

Heat stress after exercise is most likely to be seen on days when both the ambient temperature and relative humidity are high, and wind speeds are low or absent (conditions of high environmental thermal load).

Horses cool themselves efficiently by evaporative cooling. As sweat and water molecules evaporate from the skin these molecules absorb and remove body heat causing the horse to cool. If ambient temperature and humidity are both high this will slow the rate of transfer of heat from the horse's body into the environment and cooling will be delayed, increasing the risk of heat stress.

Signs of heat stress include:

- Rapid shallow breathing
- Flared nostrils
- Staggering gait/Weakness
- Elevated core body temperature
- Irrational behaviour such as lashing out with hind limbs
- Collapse

Western Australia has a generally temperate climate that horses living here can easily become acclimatized to. There are usually a few days in summer that give rise to high environmental thermal loads and the possibility of the occurrence of heat stress must be considered on these days.

However, the susceptibility of an animal to heat stress does not solely seem to be influenced by temperature. Certain factors can adversely affect an individual horse's level of hydration and therefore its ability to withstand racing in hot weather including:

- Travelling long distances prior to competition
- An excitable temperament
- Withdrawal of drinking water on the day of racing - this would not be a recommended practice in very hot weather
- Heavy sweating
- Younger horses may be less acclimatized to heat

Using the evaporation principle it is possible to assist horses to cool after racing in hot weather:

- **'Wet and Walk'** are the operative words – as water evaporates from the skin surface it removes body heat causing the horse to cool. The evaporation rate improves if horses are frequently hosed, excess water scraped from the coat and then walked in shaded, breezy areas
- Horses may need to be hosed and scraped several times in between walks
- Bucketing ice cold water over the horse may assist in the recovery of a heat affected horse
- The provision of misting sprays and fans may be useful aids in the recovery of heat affected horses but are not considered mandatory
- Horses should be allowed to drink as much fresh, clean water of ambient temperature as they require after racing

On days when the environmental thermal load is deemed to be extreme the following principles should be observed:

1. By Thoroughbred/Harness Racing Clubs and Stewards:

- Where possible horses should be stabled out of the sun and in areas that are breezy
- Ensure adequate water/wash bays and hoses are available to enable rapid post race cooling of horses
- Ensure adequate horse drinking water is available
- Race club officials should have ice, water and extra hoses available. Race club staff should provide large bins at the hose bays and ensure these are continually stocked with bags of ice and water to assist in the cooling of horses
- Ensure the swabbing stall is as cool as possible – i.e. by hosing the roof, allowing adequate ventilation or providing fans/air-conditioning
- Consideration be given to employing an additional veterinary surgeon to patrol the stable area and monitor recovering horses
- Stewards will minimise the time that horses are required to parade/be held in mounting enclosures
- If deemed appropriate, Stewards may not allow pre-race 'warm up' laps for Standardbreds on days of extreme hot weather
- At race meetings where the Bureau of Meteorology has forecast, within 24 hours of the meeting, that the temperature at the venue where the meeting is to be held will exceed 38 degrees Celsius, a trainer may, before the prescribed race day scratching deadline, seek permission from the Stewards to withdraw the horse from its engagement without a scratching penalty applied (Harness). A rider's fee will still be applicable (Thoroughbred).

2. By Club/Industry Veterinary Surgeons:

a) The Veterinary Surgeon/s should scrutinize all horses presented:

- In the mounting enclosure prior to the race
- On arrival at the barrier
- On return to the enclosure after the race
- Whilst being detained in the swabbing area

b) Any heat affected horse seen prior to racing will be immediately reported to the Stewards, and a decision will be made, in consultation with the Veterinary Surgeon, on the suitability of that horse to race.

c) Any horse found to be suffering from the effects of heat stress will be given appropriate veterinary treatment including:

- Repeated application of cold water to the entire body of the horse
- Walking the horse slowly in a breezy area
- Veterinary medications to assist recovery if required

The Veterinary Surgeon should have an adequate supply of intravenous fluids and emergency medications available, in case they may be required to treat a heat stressed horse.

d) The Veterinary Surgeon/Sample Collection Officials will monitor the swabbing procedures to ensure that horses are as cool and comfortable as possible and, in particular, monitor horses sweating and becoming distressed during swabbing. Any horses that become distressed by the swabbing process will be reported to the Stewards, and appropriate therapy will be undertaken.

1 September, 2004 (Amended)

12 July, 2005 (Reaffirmed)

2 February, 2010 (Amended)