



High temperature, high humidity, lack of air movement, and exposure to direct sunlight all increase the danger of serious heat and sun related problems for horses. The best prevention for equine owners is to take steps to minimize the risk of heat stress, and to know how to identify heat stress in a horse.

Horses cool themselves primarily by sweating; the resulting evaporation reduces their body temperature. High humidity makes evaporative cooling less efficient. High temperature and high humidity combined, as well as direct bright hot sunshine on a clear day will intensify the problem and can lead to serious trouble quickly.

Heat stress is triggered by hot humid weather, in combination with over exertion, excessive loss of body fluid or poor ventilation. The problems occur when a horse is unable to efficiently regulate his body temperature by dispersing internal heat through respiration and the evaporation of sweat on the surface of his skin. Once a horse's cooling system is disrupted and has given in to heat stress, treatment must be immediate. The primary goal is to re-hydrate the horse and reduce his temperature.

Signs of heat stress include profuse sweating or no sweating, rapid breathing rate-panting, rapid heart rate, skin that is dry and hot, and an unusually high rectal temperature. To determine if your horse is dehydrated due to heat stress, a pinch test on the neck or shoulder can be performed. Pinch a fold of skin between your thumb and pointer finger and when released it should resume its original position immediately. If it remains tented out, then the horse could have some level of dehydration.

Some horses are anhydrotic, they have little or no ability to produce sweat. Since heat loss is dependent on convection (wind) and evaporation (sweating), anhydrotic horses are prime candidates for heat stress.

Horses that have labored breathing, appear distressed, become weak, act colicky or stop sweating are in serious distress and need immediate veterinary attention. The horse should be put in shade or cool or cold water should be hosed or sponged on the horse. Important areas to direct the cold water include the inside of the legs, head and neck where large blood vessels are close to the surface. The horse should be offered water, one bucket of plain water and one with electrolytes. Hot horses should only be allowed to drink cold water in moderation to avoid foundering or colicking. Normal vital signs should return within an hour or so. The horse should have 10-14 days off work, if the episode was severe, then return to work gradually.

TIPS FOR AVOIDING HEAT STRESS

Ride your horse in the cool hours of the day. When not feasible, avoid putting your horse through an intense work out.

 Make sure that adequate water is available at all times. Horses can drink a minimum of 8-12 gallons of water per day.

Provide free access to trace-mineralized salt.

 Provide proper ventilation in stalls. When necessary use fans to circulate air throughout the stall.

✤ Giving your horse an electrolyte replacer 1-2 hours before a high performance activity will help in keeping your horse hydrated.

 Cool your horse out properly before putting him back in his stall or turning out in the pasture.

✤ Transport your horse during the cool hours of the day. If traveling into the heat of the day, be sure trailers are well ventilated and stops are made to offer your horse a drink of water.

Horse owners who know the signs of heat stress in horses can help prevent heat stroke in their animals. You can reduce the chance of injury or even death due to heat stress, by being aware. Notify your veterinarian immediately if any of these signs are observed. If you use common sense and good judgment, the risk of heat stress can be minimized, so watch the signs!