

We're halfway through the summer, and the weather has just been wonderful...low humidity and not sweltering. I hope everyone and their horses have been enjoying the reprieve from the traditional Delmarva summer. But it's still important to know how to keep your horse comfortable and healthy when the mercury shoots up.

When horses exercise, their muscles produce large amounts of heat. This heat needs to be dissipated or the horse will overheat. As a response, blood vessels in the skin dilate, and the horse begins to sweat. Through evaporation of sweat and direct transfer of heat from the skin, the excess heat is dissipated. When these mechanisms function properly, the horse is able to keep his body temperature within a safe range. Unfortunately, things do not always go as intended.

When the humidity and temperature are high, sweat does not evaporate from the horse's body very quickly. Water is an insulator so the excess sweat traps heat and further increases the body temperature. In an attempt to compensate, the horse increases his respiratory rate to blow off the excess heat. Once the horse's core body temperature elevates to a certain level, heat stress sets in. If left untreated, this condition can progress to heat exhaustion or heat stroke and become life threatening.

There are several precautions that you can take to prevent this from happening to your horse. First of all, ride during the coolest parts of the day if at all possible. Usually, this is in the early morning or late evening. Take multiple breaks during your ride to allow your horse to rest and cool off. Do not overwork the horse by asking him to perform a task for which he is unfit. Horses produce much more heat working when they are out-of-shape for the task at hand. If you'll be trail-riding or performing any activity for an extended period of time, offer the horse water several times to discourage dehydration.

After your ride, give your horse as much water as he would like to drink, and give him a cool to cold bath. Remember to thoroughly scrape all excess water from his coat so that he can cool himself more quickly. If you have access to a stall, put the horse in it and turn a fan on him. This speeds evaporation of any remaining water and cools him further.

Signs of impending heat stress or stroke need to be noticed early to prevent harm to your horse. Early warning signs include profuse sweating that seems excessive for the amount of work being performed, refusal to work, and a marked increase in respiratory rate that does not return to normal when work is stopped (blowing). As the heat stress progresses, the horse may stop sweating entirely and may even collapse.

As soon as any of these signs are noticed, it is imperative that treatment begins immediately. First, stop working the horse and move him to the coolest location in the area. Remove his tack and begin hosing him with the coldest water possible. Offer the horse water and allow him to drink his fill if he seems interested. If ice is available, stand him a bucket of ice water or wrap ice bandages around his legs and feet. The lower limbs have a large number of blood vessels and not a great deal of insulating soft tissues so they are excellent at dissipating heat. Monitor the horse's temperature closely to ensure that it is coming down with treatment. If the horse does not respond to the initial first aid, call a

veterinarian immediately. He can further assess the horse's condition and administer further treatment such as Banamine, dexamethasone, and cold intravenous fluids.

I hope that the rest of the summer weather remains as pleasant as the first half has been. Enjoy it with your horses but remember to do so safely.