# TRACK YOUR CONDITIONS TO MANAGE HEAT STRESS



## THE HORSE HEAT INDEX 1,2

EXAMPLE SCORE					
Temperature	Relative Humidity	Total	Zone		
88° F	45%	133	Medium Risk		

TEMPERATURE (°F) + RELATIVE HUMIDITY (%) SCORE	RISK ZONE	RECOMMENDED ACTIVITY LEVEL	IMPACT ON THE HORSE
130 OR LESS	LOW RISK	NORMAL ACTIVITY LEVEL	The horse's cooling system should function normally. A typical horse should be able to cool themselves. Obese or heavily muscled horses may still have issues.
131 TO 150	MEDIUM RISK	NORMAL ACTIVITY LEVEL WITH BREAKS FOR REST AND COOL DOWN	Cooling efficiency is decreased. Horse may sweat up. Overheating is possible with prolonged activity.
151 TO 180	HIGH RISK	LIGHT WORK ONLY	Significant decrease in cooling efficiency. If humidity contributes over 50 percent of the total score, the ability to release heat through sweating is reduced. Watch for signs of heat stress and ensure a cool down afterwards.
GREATER THAN 180	DANGER	TAKE THE DAY OFF	The horse is no longer able to regulate body temperature – the horse's cooling system is ineffective. Risk of heat stroke is high.

<sup>1.</sup> Caring for horses during hot weather. (n.d.). Retrieved April 16, 2020, from https://extension.umn.edu/horse-care-and-management/caring-horses-during-hot-w-ather#heat-stress-130156

#### SIGNS OF HEAT STRESS 1.2

- Breathing rate higher than heart rate or faster than 60 breaths per minute
- × Reduced feed or water intake
- × Rectal temperatures above 103°F
- × Increased heart rate
- Profuse sweating (or sudden cessation of sweating)
- × Droopy ears
- × Restless, lethargic or depressed demeanor
- × Dehydration
- Skin tent lasting several seconds after pinching the skin of the neck or shoulders
- × Muscle Cramping
- × Colic

#### HOW TO COOL AN OVERHEATED HORSE<sup>1,3</sup>

- ✓ Immediately move into the shade
- Provide fresh water and water with an electrolyte (2 tablespoons of salt per gallon).
  - An adult dehydrated horse may need up to 5 gallons of water.
- ✓ Increase air flow by breeze or use of a fan.
- ✓ Spray head, back, neck, rump and legs with cool water.
- ✓ Place ice packs over jugular veins.
- ✓ Call your veterinarian if the horse's temperature stays above 103°F.
- ✓ Continue to monitor the horse over the next few days as colic or laminitis can develop.

### KemTRACE® CHROMIUM AND HEAT STRESS

Evidence suggests insulin action is a key component of heat stress response. Chromium improves insulin function and results in efficient clearance of glucose to the bloodstream. Increased glucose uptake may improve thermal tolerance in heat-stressed animals.<sup>4</sup>

kemin.com/equineheatstress



<sup>2.</sup> Summer, Horses, and Heat Stress: The Horse Heat Index. (2017, June 21). Retrieved .pril 16, 2020, from https://equusathletics.com/horse-heat-index/

<sup>3.</sup> Help Your Horse Handle Heat Stress. (n.d.). Retrieved April 16, 2020, from https://aces.nmsu.edu/pubs/\_b/B711,

<sup>4.</sup> Rhoads. 2013. Nutritional Interventions to Alleviate the Negative Consequences of Heat Stress. Adv. Nutr. 4: 267-276.