Dr Martha Mischeff.
Risk factors for heat related illness

- Big, heavily muscled horses
- High body condition score
- Unused to the work
- Cold to warmer climate
- Dark or long hair coat
- Maximal athletic effort
- Dehydration
Heat Exhaustion vs Heat Stroke

- Less severe
- Subtle

- More severe
- Obvious
Signs - Heat Exhaustion:

- Rapid breathing or panting,
- Increased heart rate
- Elevated rectal temperature >40°Celsius (104°Fahrenheit)
- Lethargic, depressed
Management of heat exhaustion

- Discontinue exercise
- Allow horse to drink
- Move to a shaded area with good air movement
- Cold water to the entire body
Signs- Heat Stroke:

- Altered mentation
- Aggressive behaviour
- Neurological signs
- Rear
- Strike
- Run over people
Heat Stroke- extremely dangerous behavior

- Uncontrollable
- Rear and flip over backwards
Management of heat stroke:

• Keep the horse moving towards a shaded, grassy area
• Once stopped they may collapse
• Repeatedly douse with ice water
• Cool the largest amount of body surface as rapidly as possible
Experienced veterinarians:

- Tranquilize the horse on the move
- Stabilize the horse
- Avoid NSAIDS prior to rehydration - kidney damage
- Avoid steroids - risk of laminitis
Managing the recumbent horse: Safety first!

- Safety for people and horse
- Experienced veterinarian should direct rescue efforts
- Work from dorsal aspect, away from the legs
- Keep the horse down to avoid repeated attempts to stand
Managing the recumbent horse

- Apply pressure behind the poll with one knee
- Towels to protect eye and facial nerve
Treating veterinarian may:

- Place iv catheter
- Administer large volumes of isotonic fluid iv

Cold water application is continued
Heat Stroke - a medical emergency

Fast and effective cooling needed to avoid permanent damage to:

- Kidneys
- Heart
- Lung
- Brain
- Muscles
- GI Tract
- Feet
Follow up monitoring:

- Heart rate < 50 within an hour
- Respiratory rate 18-24 within an hour

Ensure normal
- Temperature
- Urination
- Defecation
- Water consumption
- Appetite
Follow up monitoring:

Complete blood count, biochemistry evaluation to check:

- Kidney function
- Hydration
- Muscle enzyme levels
- White blood cell values
Most horses make a speedy and complete recovery

• Prompt, appropriate treatment
• Good follow-up care
Thank You!